Guadalcanal
And the Origins of the
Thirteenth Air Force

Army Air Forces Historical Studies: No. 35

Prepared by
ASSISTANT CHIEF OF AIR STAFF
INTELLIGENCE
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ARMY AIR FORCES HISTORICAL STUDIES: NO. 35

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AND THE ORIGINS OF THE

THIRTEENTH AIR FORCE

The original of this monograph and the documents from which it was written are in the USAF Historical Division, Archives Branch, Bldg. 911, Maxwell Air Force Base, Alabama.

Prepared by
Assistant Chief of Air Staff, Intelligence
Historical Division
July 1945
FOREWORD

This narrative has been prepared by the Historical Division, AC/AS, Intelligence as a contribution to the history of the Army Air Forces in the current war. Like other studies in the series, it is subject to revision as additional information becomes available.
CONTENTS

INTRODUCTION .................................................. 1
I THE BATTLE FOR HENDERSON FIELD ....................... 16
II THE ORIGINS OF THE THIRTEENTH AIR FORCE .......... 68
III PROBLEMS OF INTELLIGENCE, TERVION, AND AIR TRANSPORT .... 91
IV SUPPLY AND MAINTENANCE ............................. 122
V THE GROUND AND AIR OFFENSIVE ..................... 149
VI CONCLUSION .............................................. 179
GLOSSARY .................................................. 192
NOTES ...................................................... 193
BIBLIOGRAPHICAL STATEMENT ............................ 243
APPENDICES ............................................... 245
INDEX ..................................................... 271
The instructions to CG. STRA first contained one clause which alarmed the Army. Not only was operational control assigned to the Navy but all training and indoctrination as well. Army commanders deplored the prospect of entrusting responsibility for the training and indoctrination of their air units to CG. STRA, and they opposed the possibility that their units would be fed piecemeal into the larger naval air establishment. Therefore all recommendations were to the effect that naval jurisdiction should be confined to operational control. After extensive debate in Washington, this solution eventually was accepted.

Gen. William F. Herron, the senior Army commander in the South Pacific, arrived at Toau on 29 July 1943, only two days prior to the opening of the Guadalcanal offensive. He came as the result of a realization both by the War Department and the Navy—particularly by Admiral Halsey—that the presence of a general officer representing the Army was urgently needed in the South Pacific. Accordingly, on 7 July the Chief of Staff had informed General Herron of the latter’s designation as Commanding General (CG. LSTRA), United States Army Forces in the South Pacific area (USAFARMA), and it was made clear to General Herron that his position would be subordinate to that of CG. STRA. Therefore, the Army commander was charged with responsibility for training and administration of all U. S. Army ground and air personnel within the area, exclusive of Canton Island, and he was instructed to assist CG. STRA in the preparation and execution of plans for the employment of Army forces in the
ILLUSTRATIONS

Map of Solomon Islands ................ frontispiece

MAPS following

Northwest Corner of Guadalcanal ........ 61
North Coast Guadalcanal and Mt. Austen Area 152

PHOTOGRAPHS

Henderson Field as of 12 October 1942 ........ 33
Henderson Field as of 9 December 1942 ........ 148
Guadalcanal and the Origins of the Thirteenth Air Force
The Battle for Guadalcanal represents the first successful attempt on the part of Allied forces in the Pacific to mount a sustained offensive against the Japanese. On 7 August 1942, the date of the initial assault upon the enemy's positions on Guadalcanal and at Tulagi, was not the first choice of the Joint Chiefs of Staff in Washington. Rather it was the result of the rapid Japanese advance down through the Solomons. Early in June the enemy had established himself at Tulagi on Florida Island; by 4 July 1942 Japanese troops and laborers were reported active on Guadalcanal ready to begin construction of an airfield on the Lunga Plain. If the Japanese should be permitted to base heavy bombers on Guadalcanal, the low mountains, only 649 miles distant, would lie within reasonable range and the entire South Pacific life line to Australia would be placed in jeopardy. The next enemy advance southward would be to New Georgia, a key point in the route to Australia. And by June, New Georgia's defenses consisted of no more than approximately a division of ground troops, one fighter squadron (the 37th), and one medium bombardment squadron (the 65th). On Guadalcanal the Japs must be checked or it would be too late.

Throughout the spring and summer of 1942 extensive debate had arisen in Washington over the strength and tactics best suited to hold the chain of islands leading across the South Pacific to General MacArthur's forces in Australia. Basically the debate was
a continuation of the cleavage in opinion between the Army and the
Navy as expressed in the Joint Board report of September 1941. At
that time the Navy had taken a stand against preparation for a land
assault against Germany, maintaining that the Pacific was the pre-
ferred theater of operations. The Army, on the other hand, was
aware of the possible necessity of challenging the German armies
on the continent of Europe. 2 This basic difference in strategic
thinking seriously affected the subsequent efforts of the two ser-
vice in the South Pacific. More directly it influenced the actions
of the AF which had selected as its primary task the destruction of
German industry. General Arnold agreed fully on the necessity of
holding the island chain, but he was fully sanside of the heavy
demands which would be thrown upon the AF by the rapidly develop-
ingen war, a war in which the South Pacific represented only a
small segment. The demands of other areas were too heavy to permit
the establishment of powerful air forces across the Pacific.
Navy spokesmen desired such a move; General Arnold resisted it.
Instead, he stressed that the JF must not sacrifice its mobility;
that it could place small contingents of fighters along the line but
that heavy bombers were too few to merit such dispersion. They
must be held as mobile striking forces at each end of the line, ready to
shift from island to island to meet any enemy threat.

In accordance with this plan the 11th Expeditionary Force (F)
was designated as the Mobile Force, Central Pacific, on 16 July. 3
Within 3 days all four of its secondary depots for new islands
under the command of Col. L. G. Saunders. Then these units arrived at Plains for Crises on New Hebrides: they entered a new theater.

Effective 8 May 1942, the entire Pacific Ocean area had been designated as a strategic area under the control of the Commander in Chief, U. S. Pacific Fleet, who was Adm. Chester W. Nimitz. Under CINCPAC, as Admiral Nimitz was known, stood another naval officer in command of the South Pacific. This was COMSOUTHPOAC (Commander, South Pacific Area), who was Vice Adm. Robert L. Ghormley. 3

The primary tasks assigned to COMSOUTHPOAC were to (1) hold the island positions necessary for the security of the line of communications between the United States and the Southwest Pacific Area, (2) support operations of forces in the Southwest and Central Pacific, and (3) prepare to launch a major amphibious offensive against positions held by Japan. 4 In order to discharge these missions, Admiral Ghormley was given command of all base and local defense forces then assigned or to be assigned to the South Pacific, exclusive of the land defenses for New Zealand. Under him was still another naval officer, who as Commander Aircraft, South Pacific (COMFARPOA), controlled the operations of all aircraft in the area regardless of service or nationality. Thus the task of initiating air operations in the South Pacific fell to Rear Adm. John S. Halsey, who had assumed his command as COMFARPOA on 70 May 1942. 5 However, direction of the air effort in the greater part of the Guadalcanal campaign was to be the responsibility of Rear Adm. Aubrey F.itch, who replaced Halsey on 15 September 1942.

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South Pacific. Perhaps more significant of all was the warning from General Marshall that for the present operations in the Pacific were to be restricted to those necessary to support the strategic defensive, and requirements for the area were to be held at a minimum consistent with that role. Thus it was inevitable that the air units under General Harmon's command could play other than a subordinate role in the South Pacific. From the outset the theater held a low priority in the global hierarchy of importance.

Force 2055, as Harmon's U.S. ISA unit was designated, had been organized on 30 June 1942 at Fort Ord, Calif. By 1 July, Harmon was able to leave Hamilton Field with the advance echelon of his command, reporting to G-2, and 6 days later and establishing a provisional command post at Faleata. Next day (6 July) Chorley informed all South Pacific base commanders of the responsibilities of both General Harmon and Admiral Nimitz. U.S. ISA was to control training and indoctrination of naval aircraft only; over Army aircraft he would confine his authority to operational control. When the command post shifted to Honiara on 29 July, this colonial capital of the Solomon Islands became the center of activity for U.S. ISA. Now there was some prospect for a better basis of organization and maintenance of the Army forces on the numerous island bases scattered about in the South Pacific. And since at least seven officers of the original group of nine in Harmon's advance echelon were Air Corps officers, there was reason to believe that the interests of the AF would be understood and defended as well as the
command structure would permit. Brig. Gen. John F. Kimball, who was destined to lead the Thirteenth Air Force, came out as Harmon's chief of staff. Lt. Col. Donald L. Steinwart was the fighter officer of USMCIA; at a later date he was to command the fighter of the Thirteenth Air Force, while Col. Paul Herbert Harmon's bombardment officer, later moved over to head the Third Bomber Command. The supply officer of USMCIA was Col. Robert B. Brooks, also of the Air Corps, as were Col. Glen C. Jirickson and Col. Lawrence E. Sherman, whose assignments were respectively G-3 and G-2 of Harmon's South Pacific command.

General Harmon quickly realized the necessity for the establishment of special combat groups on the larger islands to provide control over ground troops and air units attached to each island. His requests resulted in the activation in October of the I Island Command (New Caledonia) and the II Island Command (Fiji), each of which had its Island Air Command with an air officer exercising local control over all the air units in the command. These were placed under the direct control of USMCIA, and upon organization of the Thirteenth Air Force, the island air commands remained directly responsible to General Harmon.

Then the X-17's of the 11th Group landed on Munda for Colona, New Caledonia, in late July, facilities for the support of sustained bombing operations against the Japanese in the Solomons area were slim indeed. Recent orders had not been received at Munda, held in time to send adequate ground personnel in advance of the group's
air echelon with the result that maintenance crews were still some- where at sea. Nevertheless, the 11th group entered immediately into a daily over island pattern which required the combat crews to perform their own maintenance work. As the forces gathered for the assault upon Guadalcanal, the 2-17's took their station on Midway and the very primitive strip hacked out of the jungle and coconut trees up on Espiritu Santo during the last weeks of July.

D-day for the landings on Guadalcanal and Tulagi had been set by 0630 on 8 August, though subsequently it was necessary to delay this date one week to 15 August. The role of the 2-17's in the invasion was fixed by Admiral Halsey, then assigned to Colonel Chandler, the task of striking at Guadalcanal and Tulagi over a 6-day period immediately preceding the initial assault by the First Marine Division. For a week the 2-17's struck daily at the enemy's installations on the Lunga Plain; then, with the Marines ashore on Guadalcanal, the bombers were assigned the task of searching the area over the lower and central Solomon's. Their base was Espiritu, which was 340 miles distant from Henderson Field and where 0630CPA's flagship Curtis lay in the Second Channel. Only rarely could they land in the newly won advanced air strip, for it was under frequent and heavy attack by enemy air and surface craft.

It took several marine engineers and the 6th Coast Artillery prepared the Lunga strip, unofficially named Henderson Field, for fighter planes and dive bombers. It was on the afternoon of 16 August the first two marine squadrons arrived. One was VMF-232 (Capt. John L.
Smith) with 12 P-40's, the other was 755-22 (Lt. Col. Richard D. 
Lowry), flying 12 SB-2's. Two days later this force was increased 
by the arrival of five P-40's which had flown up from New Caledonia 
through Natao and Espiritu. Led by Capt. Max B. Emerson, these 
planes, plus the nine additional P-40's which came in on 17 August, 
represented the advance echelon of the 67th Fighter Squadron, which 
now became the first F7 unit to operate from Henderson Field. 11 Imme-
diately these aircraft and their subsequent reinforcements were placed 
under the operational control of the Marine Aircraft Group 56 and 
joined the Marines in the defense of Guadalcanal.

General U. S. Grant faced a number of critical problems in the South 
Pacific. For the Army, particularly, for the AF, the South Pacific 
represented an area where claim upon the available equipment was sub-
ordinate to that of the European theater. The AF, on the other 
hand, was taking its major effort here, employing its best equipment 
and ablest personal. Thus Emerson was forced to do what he could with 
the equipment he had on hand, supported by a thinner flow of air re-
inforcement than that received by the naval air commanders. And in 
the fighter category, the I-200 was no match for the Zero or the 
enemy's bombers. The plane was an export version of the early P-39, 
originally destined for the British. It lacked proper supercharging 
equipment, and its oxygen system was of the high-pressure type. 
Since no supply of high-pressure oxygen bottles was available on 
Guadalcanal, regardless of other shortcomings of the plane, pilots 
were forced to remain at low levels where the use of oxygen was not
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...As a consequence the high scoring bombs on Guadalcanal went to the marines in their Gruman Wildcats (AD), for the Japanese bombers normally attacked at altitudes well above 10,000 feet. Since the SB2C’s with their available equipment were unable to achieve an altitude much higher than 10,000–12,000 feet, they could not join the marines in the interception.

Very early in the campaign General Vandegrift, Commander of the First Marine Division, recognized the ineffectiveness of the SB2C. After the plane’s first initial clash with the Japs on 31 August, the Marine General recognized that the SB2C was being called upon to perform a task beyond its ability. On 3 September he informed General Lemnitzer in Hawaii that SB2C.s will not be employed further except in extreme emergencies; they are entirely unsuitable for fleet or carrier missions. Vandegrift’s statement of the case was not entirely accurate. There was a use for these planes. If they could not join the marines in high-altitude interception of Japanese bombers, let them stay down within their effective altitude and cooperate with the ground forces. This was useful work and though it might be less spectacular than the brilliant performance of the marine fighter pilots, nevertheless it was a substantial contribution to the defense of the island.

Thus from 9 September onward, the 37th sent its SB2C’s up and down the beaches and juniper of Guadalcanal, bombing, strafing, and...

* CACTUS was the code designation for Guadalcanal.
harassing the Japanese ground units. Soon the AAF pilots were
cutting out enemy transports, barges, destroyers; in fact they did
everything but en rage the F6 bombers at high altitude. Air-
function reigned almost exclusively marine until newer models of P-38's,
and finally P-43's, arrived to replace the P-40's. Despite its
shortcomings the P-40 had redeemed itself in part. General
Vandegrift consistently used the plane against key position which
blocked his advance and particularly against key points. He
considered the P-40 an invaluable weapon and asked for more, and
Capt. Lott Crider, USMC, 1220's chief of staff, regarded it as
"tremendously effective" in its striking role. Nevertheless,
General Dovan observed the performance of the fighters and was
dismayed that they were forced to play a subordinate role. Fre-
quently he sent in to J7 Headquarters urgent request for better
planes. He wanted P-38's and P-47's, something that could operate
above 20,000 feet; otherwise the morale, elan, and effectiveness of
the US fighter units in the South Pacific would be lowered.

Throughout the Guadalcanal campaign one of General Dovan's
major tasks was to secure a regular flow of replacement aircraft and
crews to the South Pacific. With nearly each request he was reminded
of his theater's low rank in priority, that any considerable increase
in strength must await fulfillment of prior commitments to other
areas. The J7 of course was not concerned in the debate over
the relative priorities of the J7 in the South Pacific. His air and
surface forces bore the brunt. The marine held won Guadalcanal increasing-
precious, and it was apparent to the Joint Chiefs of Staff after
such discussion that a reasonable flow of aircraft to the South
Pacific must be maintained if the island were to be retained.
Japanese destroyers and cruisers regularly fed in troops under
cover of darkness, shelled Henderson Field, then retreated toward
Ruins before they could be caught by the dive and torpedo bombers on
Kwajalein. By early October it was evident that the Japs were
assaulting great strength for an attempted recovery of their lost air
installations on the island. Add the pressure of the enemy attacks
in October, the Joint Chiefs of Staff reached agreement on a schedule
of reinforcements for the South Pacific. This schedule provided for
General Doolittle's minimum of 70 heavy bombers, 30 medium bombers, and
100 fighters, exclusive of the fighter squadrons at Canton, of
that named by the new islanders at Fiji (later at Funafuti),
and of the forces at Palau, Christmas, Johnston, and Tofol
islands. All these aircraft and crews were to be at the complete
disposal of the area commander (02.02.03), who was free to shift
them about as necessary. Thus after some 3 months of combat in the
South Pacific, the Japs could not hope to maintain a regular
flow of reinforcements for their own equipment and tired crews.

Another problem which plagued 02.02.03 during the early
months of the Kwajalein campaign was his inability to move his
heavy and medium bombers up to Henderson Field. Other than the
small detachment of the 87th fighter squadron, no other AM unit
was based on Kwajalein until December. The island had been
occurred on 7 August, yet 5 weeks later the landing field was still unusable by deck and heavy bombers while fighters and other smaller aircraft could only when the rolled earth surface was dry. The "C" had taken off in heavy and at a time when other planes were grounded, but the 37th was not defendin Henderson against the Jap bombers. If the enemy attacked in wet weather, the F-1's of the Marines were generally grounded.

The entire question of supplying Guadalcanal was critical. Here were no harbor at the island itself. Cargo vessels lay off land to discharge food and ammunition, often withdrawing prematurely under the threat of Japanese air attack. The entire beachhead was anything but secure. Enemy bombers regularly strafed the field during the day, while at night Japanese surface units shelled it. By 11 September, General Hinson had become increasingly apprehensive over the situation on Guadalcanal. He pointed to the growing concentration of enemy strength on Bougainville and in the lagoon, as well as on Guadalcanal itself. There was a rare opportunity for the heavy bombers, but they could accomplish very little so long as they were forced to fly 300 miles to the rear in Espiritu Santo. The "L"-17's could do no more than occasionally strafe through Henderson in their effort to strike at enemy shipping in the sun-lit lagoon over at the southern tip of Bougainville, and the loss of fuel on the island prevented this procedure on anything more than a sporadic and limited scale.
Supply and maintenance of Guadalcanal was not the responsibility of O.C.S.-80, but it was the Navy's task. Therefore General Halsey did not wish to criticize too severely, since he was "not fully confident, nor perhaps conversant of all the factors that go to influence any decision." But he felt that the existing lack of air facilities was traceable to the lack of vigor in bringing up surface transport, particularly lack of vigor in securing rapid establishment of air installations on the nearby island. He recognized the difficulty which faced the naval commanders, but "the point is that it was not the consummation thought in every Naval Commander's mind and the sum did not have it first and immediate objective the seizure and development of Guadalcanal as an air base. But it was something that could follow along."  

It was General Halsey's firm belief that the Japanese could not be defeated in the Solomon if preparations for an effective air assault were left to "follow along." He urged Admiral Layton to order the establishment of facilities for S-17's on Henderson Field, but throughout September not much was accomplished. In fact by mid-September the Army commander strongly doubted that Guadalcanal could be held at all, unless more vigorous action were initiated by O.C.S.-80. His pessimism increased during the following month. The possibility of loss of the island was ever more real, and Halsey was convinced that the Navy could and would recover Guadalcanal unless the Marines were strengthened and unless the heavy bombardment could be brought up to Henderson. Only...
from this base could the enemy easily reach the Biak-Jabau area where the enemy would land his surmise craft for the assault on the Lower Salomons.

In an analysis of the current situation in early October, Herson offered three concrete suggestions to OQ-5000. First, immediate reinforcement of Guadalcanal by not less than the equivalent of one infantry regimental combat team; secondly, the introduction of naval surface action in the waters of the Lower Salomons; and, thirdly, the prompt dispatch of all airbase construction personnel, together with construction equipment and supplies. Air reconnaissances for Guadalcanal included the correlation of two all-weather runways and improved runways, improvement of fueling system and of storage, and improvement of the fuel supply so that there would always be available a minimum reserve of 250,000 gallons. Then all this was ready, air commanders should initiate intensive air operations against Biak-Jabau-Tulagi and Lae, continuing at the same time short-range air operations against land, sea, and air objectives.

On 30 October, Vice Adm. William F. Halsey relieved Admiral Halsey as OQ-5000 and the change in command placed a new complexion upon the entire South Pacific area. In the same day Herson had reported that Guadalcanal was “right where it was from the beginning.” Now there was hope for an immediate improvement. The prevailing weather at 1000-2300 October 7 had cleared and OQ-5000 and OQ-5013 could report that “Halsey is fine—ready to listen, reasonable in his
attitude and above all has the drive, initiative and courage to 'get things done.' Believe our hands are up. Perhaps they were.

Certainly the reports emanating from WASHINGTON after Kelsey’s arrival were refreshingly optimistic when contrasted with the gloomier prospects outlined in September and early October.
In view of the vital decisions affecting Guadalcanal which were reached in Washington in October 1942, it is appropriate to examine in some detail the operational role of the air in the South Pacific during the critical months of the campaign on the southern Solomons. It was evident that the position of the South Pacific air forces had been strengthened as a result of enemy pressure, for the threat to Guadalcanal had driven home the necessity for providing a regular schedule of replacements. Almost simultaneously, the command structure had been strengthened and clarified by Admiral Solomons' cooperative attitude and by his aggressiveness. Furthermore, closer physical proximity of the senior army and navy commanders at Guadalcanal, a factor which tended to facilitate closer relations between the two services in the South Pacific.

Even prior to his arrival at Guadalcanal, General Hap Arnold realized that insular air had too far to go to permit intimate contact with the progress of events, although the island officially had been designated as headquarters for the entire South Pacific. Therefore he ordered General Hap Arnold to establish and maintain headquarters in the harbor aboard Guadalcanal, a former submarine tender. Both senior officers left a rear echelon behind...
then in Auckland, where Maj. Gen. Bush L. Bicknell remained in charge of NZAF(1) administrative section which was to maintain contact with the New Zealand Army and air force. Brig. Gen. Robert E. Blythe arrived in New Zealand to handle supply problems, but this was a temporary arrangement and he moved up to base headquarters in November. Then Ploidy arrived in the South Pacific, he was no longer inclined to General Bicknell to control operations from Auckland. After he moved there the resultant proximity of the headquarters permitted easier and frequent contact between the chief of the two services.

Throughout September and October the 5-17's of the 1st continued to carry on their excellent search missions from Kiritimata or the possible from Auckland. The primary function of the heavy bombers, once the Harrows were airborne on Auckland, was to patrol the water lying north of the islands and to keep U.S.N. and Army informed as to Japanese carrier movements. According to the bombers covered daily search sectors which fanned out in a northwesterly direction from Kiritimata in areas of 600 square, extending approximately 600 miles with a 100-mile width at the extremity. They covered the area on Santa Isabel and Choctaw in the Loyalty Group area. When conditions permitted, storage through Auckland, the bombers could extend their range further north to points above the Kita-Northwest-Indies area where they could maintain close watch on enemy shipping moving down from Hawaii to Tokyo. These were long missions covering 17 hours in flying time, although it was not always possible to complete every search, either to bad weather or...
encore action. Nevertheless, a statistical study for operations compiled for the months of August and September indicated a total of 250 search-plane take-offs, for an average of more than 1,500 miles per mission; and to this figure must be added 150 planes which were sent on 51 special bombing missions, or 1,650 miles per take-off.

In addition there was the not inconceivable movement of aircraft between bases in preparation for all these missions.

Lack of facilities remained a problem in the face of Colonel Sanders throughout August, September, and October. In 31 September, General Hoxton had reported that he was conducting limited operations from Saipan with 1-17's, but the account still lay upon "limited." There simply was not sufficient fuel at Henderson to permit continuous operations, and it was not until the end of October that air and surface elements of Halsey's command had cleared the western of the Saipan bases sufficiently to permit convoys to move into Saipan with any degree of security. Even if fuel had been available, there was a lack of service personnel; during the first 3 months of operations it was the Marine ground crew who shouldered a substantial share of the burden of refueling the 1-17's at Henderson where they were just as anxious and determined to get us serviced as our own people. Well might we, for every ship sunk or damaged in the waters north of Henderson field, have less to pour its troops ashore on the beaches of Saipan.

In the runs north of Saipan, as the month wore on, much could carry. 3-17's flying sectors whose full coverage required as much

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as 1,700 miles of flight were not able to operate with full efficiency as striking planes. On occasion they moved all the way to Nita on the eastern side of Nou-Imville and then around to touch the Bula Passage. But for the most part the planes combined their missions, carrying extra fuel to enable them to cover the distance and a reduced bomb load to afford some prospect of securing hits. The area at the lower tip of Nou-Imville, where the harbor of Nandioli and the settlement of Bula lay, behind densely wooded Northland Island, was most profitable for attacks by A-17s. Here was a focal point for enemy shipping coming down from Neutral, Tulau, and Iriti. Frequently it was possible to catch a cargo vessel, a tanker, or a merchant ship moored in or from this point or ride at anchor in the harbor; unfortunately, the presence of enemy Child Field made it a danger zone.

The course, which emanated from Bula Lagoon between the two corries, bore on the west, Costa Isabel and Chiecul to the east. This was the "slot." Search planes covering it rarely failed to sight one kind of enemy craft, and the list of contacts included nearly every category in the Japanese navy. Destroyers were elusive, maneuverable, and very difficult to hit; as destroyers discovered, "they could turn on a dime." Better success was achieved against slower-moving cargo vessels, but a single search plane might effect only limited success against one there.

There was always the anticipation of contending another of the Japs' marine flying boats whose bulk was even greater than the A-17. On one occasion, a group was engaged, shots were exchanged at a range of

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The target, but no visible damage was inflicted. Later in another attack, two 7.7-mm. bullets penetrated the oil tank of the S-17's No. 1 engine, but despite the plane which flared up, the plane continued with the mission, delivering a 15-minute strafing attack on the enemy landing barge and a torpedo boat in the vicinity of Cite Island. In the 6th attack another flying boat was encountered; the S-17 attacked but very early in the flight it broke into flames and crashed on Reodor Island where its crew perished. This was the plane's final mission. Near the end of the mission, the enemy plane either landed or crashed in the water.

As the report stated, it was obvious that air opposition would stiffen. Apparently, the new organized defense at the base for enemy bombers based on Iceland and on a September, 70 bombers and fighters were reported on the field. A submarine base was in operation at Cite, lying just west of Iceland and in the New Georgia group, while there were signs that the heavy bombers would encounter antiaircraft fire from installations at Cite and Shortland Islands.

Of all targets sighted in the slot, most numerous and elusive were the destroyers which were serving either as scouts for heavier units, as escorts for cargo vessels, or the solo, running troops and Crown on the wind. The Japanese were determined to reinforce the units on Guadalcanal.
one or more destroyers, but their inaccuracy almost jelled attempts to hit them. During the period 14 August to 13 September 73 destroyers were contacted; four of these were bombed, but not one was credited as a positive hit. Often they were not in force. On 9 September a -17 just east of New Georgia encountered a battleship escorted by 14 destroyers or light cruisers, but our SB-16s were unable to hit the major target and the enemy task force defended itself with heavy and accurate fire. Better success was achieved against heavier vessels, and one of the most interesting strikes was the sinking of a Japanese light cruiser or heavy destroyer in full view of the cruiser just off Umanpoot on 19 October.

By after day the pattern was the same; search reports revealed the presence of a wealth of targets all through the central and outer Solomons. Sometimes the target was a small force of two destroyers or min, or an isolated X-pattern. In all it was a full-sized and powerful task force, such as that set adrift in September, consisting of four ships north of the Santa Cruz group, and this one consisted of at least three battleships, four heavy cruisers, and a number of destroyers. On 19, 20, and 21 December a search was made for the same group, but it was not found. In one case a probable, the other a possible hit, yet the task force continued on its way. Three days later a splendid opportunity occurred at Bismarck where a search plane sighted a carrier, tender, cruiser, and several destroyers and cargo vessels; the
tender was attacked with 7 x 20-rounders from 7,500 feet, but the shells were utterly and by some means they were not hit.

As often as possible the planes were flown up to Henderson where they were refueled--then flying for available--then sent out on their searches from Henderson for a distance of 100 miles on the north line covered 10° arc, then returned to the home base at Henderson. Four planes did this on 10 September, enabling General H.H. Hare to inform the chief of staff that he was now carrying on limited operations from Henderson. On this same day a striking force of 16 planes was flown out at sea from Henderson, seeing a carrier which had reported landing west at a point approximately 100 miles northeast of Tsuiki in the Santa Cruz group. This time, weather conspired against the success of the mission; not only was the current not located but by mid-afternoon of the 13th, three planes had not returned. All three were down at sea, having successfully crash-landed, and their crews had taken to their rubber boats. One of the crews succeeded to reach the northern tip of New Hebrides, where 24 hours later recovery found them all alive, including Commander the pilot of the A.D.C. C. MacDonald's plane Solomon, but the third drifted 7 degrees to the north before it was picked up by a U.S. warship and by then two men had died of exposure. MacDonald's doctor remained on it.

In all, the search for substantial concentration of ships near Henderson, including a possible carrier, three cruisers, two transports, and several smaller craft, did not locate any craft, and later recovered 2-17's d {illegible} up and never reached their destination because prevented as the plane.
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fall back to Henderson, returning to Joratita on the 1st. 

their, so as to lose of them, royal firi armed Colonel Smollet and his
equipped commanders.

Avalability of fuel at Henderson determined to a large extent
the range of operations from that base. On 21 September several planes
covered on one 350 filler tank which carried the to the northern end
of Joratita, but this was not a constant occurrence and could not
be maintained on a daily basis. Targets remained the same. The ground
and deck installations were hit regularly; so were those
at Joratita. On one flight the radar planes and
flying boats provided constant protection to the gunners of the
I-17's, and for a time the pilots obtained too the planes down to
strike. On 16 September five squadrons strung shreds were run over
Joratita bay, and a similar treatment was given the coast itise on
the 18th. My general knowledge General Kim felt that the I-17's might be
put to better use than ground or water steering, for he informed
General Smollet that he was putting a curb to such activities.

The month of September was a period of instruction for the I-17's
and their crews. There was much to learn about the craft of moving
surface craft, and the crews tried to adjust to the conditions.

One the I-17 crews first went into the area, only few of the crews
had any experience with maneuvering targets, other than a few missions
against the I-17's target ship. There were two of the targets used, but this was a different proposition. For we
were out to test the contacts on maneuvering targets.
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It was possible to present an analysis of bomb-in results, and then surface craft. Of the 165 vessels of all types which had been contacted in the period extending over 31 July to 20 September, 169 had been bombed, and of this number 12 were hit. Assessment of results, always a difficult task, was doubly complicated in the Solomon by the small number of observers to furnish verification. Aircrews themselves were not always certain of the effectiveness of their bombs.

Nevertheless of the 6 ships damaged, 3 were listed as sunk, 2 wounded, and 6 others badly damaged by close misses. Ten of the attacks were delivered by single search planes, 6 by 2-ship craft, 5 by 3 planes, and only 1 by 6-17's. Hence it was premature to cast a balance of the work of the 1-17's. However, their major effort had been in pinpoint search missions; they rarely moved in force and 6 months of vigorous action by ships during which time further observation of their effectiveness will be made.

In September it was obvious that the medium escorts of the 11th Group were not sufficient for the job at hand. In October General MacAuliffe ordered to send without delay another 1-17 squadron down to the South Pacific; the necessary maintenance personnel were to move by air, while the ground echelon would proceed by surface transport. The next day MacAuliffe ordered to send 12 1-17's with this squadron, all of them to be equipped with 20mm turrets.
response to these orders, three H-37s left Rabaul on 21 September, carrying the maintenance personnel of the 73d Squadron of the 5th Embordment Group (H); and by the 23d the B-17s of the 75d had arrived at Kokiri State, although the remainder of the ground personnel were not disembarked until 4 October.  

With no loss of time, the new squadron began participation in the daily routine of the veteran 11th Group. On the day after arrival its aircraft were up over Shortland Island and on the 25th a similar mission was carried out, with the planes returning over Rabaul at 0300. Little attempt was made to preserve the integrity of the two groups operating from Rabaul State and eventually the two were combined for operational purposes.

The new squadron was only the first of the 5th Group to arrive. In face of the Jap move pressure, General Hap Arnold had been authorized to call upon the Xth Air Command for aid. He made use of his authority. On 17 October he reported 5 heavy squadrons with 55 aircraft in the theater but informed General Arnold that he needed 50 aircraft and 11 crew. Of medium bombers he had present 2 squadrons (the 34th and 75th) with 13 planes and 23 crews; he required 1 entire group of 30 aircraft and 30 crews. He restated his need for dive bombers. A complete group should be sent out: there were no any dive bombers whatsoever in the theater. Two fighter squadrons were available, with 27 aircraft and 33 crews each; there was need for 7 squadrons (20 planes) and 735 crews, exclusive of the 14th heavy squadron at Rabaul. These estimates include:
included 15 B-17's on route from Bari to Italy and 7 B-24's from the U.S., 
financed with 70 per cent reserve for bomber and 30 per cent reserve for B-40 aircraft. Moreover, it was further noted that 
the number of combat crews be increased to 12 crews per day as 
soon as practicable. 92 Even though the bulk of the request could
not be filled, four B-17's were on the way. The second squadron of 
the 8th Group was on route, bringing 12 more bombers and crews,
followed shortly by a third squadron which left Italy to bolster the 
5th Group; squadron already arriving under General Lien. 93 The 5th 
Group was scattered, so it was to remain so, not until April 19-45, 
when its air and ground echelon of group headquarters, and all 
echelons brough together at the same time at one forward base. 94

During October additional components of the 8th Group were sent 
out into Italy. General Lien had requested on the 15th that the 
ground echelon of one additional heavy squadron be sent direct to 
Malta. The proposal received approval of the Air Department; on 27 
October, Lien was instructed to send out the service personnel 
direct to Malta. 95 By the end of the month 18 aircraft had been sent 
on to Malta and since then, together with the flight personnel, 
represented three entire squadrons, the ground echelon of the 50
Squadron was scheduled to leave next, in order to provide necessary 
work, maintainance, and administration of personnel and of in the 
South Pacific. 96 Furthermore, since three of the four tactical 
squadrons could not operate from the base in Italy, retention of the ground headquarters of 8th in the rear created

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arrived and went to send the Headquarters along with the 1st and 2nd

squadrons, in order to eliminate and supervise the three squadrons.

General Arnold approved no changes and on 1 November the three ground

squadrons of the Headquarters Squadron, 6th Bombardment Group (L),

of the 321st, and of the 318th Squadron departed for the dive bomb

the "President Lox." 61 Combat commander was Col. Ernest Allen, who

left Koror in A-17 on 10 November bound for Espiritu Santo.


Since the 8th Group joined the 11th, one squadron going out after

another, until only the 39th remained in Koror. General H. was

held this unit, explaining it in transition training of pilots and in

the local navigation school. To replace the 8th, he asked for

another heavy group, but none was available. 62


The purpose of these two heavy groups and of other Seventh Air

Force units in the South Pacific raised a question concerning their

status, for they remained technically within the Seventh Air Force

in Koror. On 13 October the headquarters requested clarification,

having learned from the Air Department that the 11th Bombard-

ment Group, the 728 Bombardment Squadron, and other heavy bomb-

ardment squadrons currently on route to the South Pacific were still

assigned to the Seventh Air Force for administration, supplies, reclassifi-

cation of crews and men, as for such higher echelon maintenance as could

be provided. 63

This error must lead to clarification; hence still

was certain to the status of the 8th and 11th groups and of the
13th and 49th fighter groups, which had been assigned to units in the South Pacific, were redesignated on 21 November 1943 as the 50th Air Force Units in the South Pacific be transferred to 11th Air Force, with the 11th Fighter Group's experience with the 11th Air Force was convinced that the great distance and the difficulty of communications rendered impracticable further administrative control from Hawaii.

The Chief of Staff recognized the difficulty, authorized General Lewis to transfer administrative control and records of all units except for the Central to the South Pacific, or vice versa, at the time the unit personnel was moved, so that the latter could settle locally between the two commanders. The transfer was done promptly. On 20 November 1943, General Lewis, on behalf of the Second Army, authorized the South Pacific command on 1 December 1943, to assume control of the 5th and 11th Bombardment Groups (S), the 13th and 49th Fighter Groups, and the 13th Air Command, effective 1 December 1943.

On General Order No. 100, 3 December 1943, the Second Air Force assumed the formal transfer of the following units to the South Pacific area:

- 11th Bombardment Group (S)
- 50th Bombardment Group (S)
- 13th Bombardment Group (S)
- 49th Bombardment Group (S)
- 13th Bombardment Squadron (S)
- 49th Bombardment Squadron (S)
8th Bombardment Group (L)  
3rd Bombardment Squadron (L)  
9th Bombardment Squadron (L)  
15th Bombardment Squadron (M)  
15th Bombardment Squadron (M)  
35th Bombardment Squadron (L)  
15th Fighter Squadron  
30th Fighter Squadron  
75th Bomber Squadron (W)  
37th Bomber Squadron (W)  

With the arrival of the units of the 8th Group, aircraft and crews were distributed over the airfields of the 11th, from thenceforth they operated practically as a single force. It was soon evident to establish a joint headquarters of the two groups. The first step taken on 3 December was the joint control exercised under Maj. General Hare. It was very difficult for both forces to coordinate action from two locations; there was not enough for all of them.

After their reverse lies in hard use, the Japanese carried on only minor surface activity in which their destroyers tangled with naval torpedoes boats, "trelling out of July. But they managed to push through to Guadalcanal and steadily built up their ground forces over the island. This was the result of the "Coastal Defense" -- a varied force of destroyers and light cruisers which would be off Guadalcanal in the dark afternoon and by evening, at 10 knots would be off Guadalcanal after dark. We were the vessels unloading men and supplies, three or four rounds a Henderson Field, then either at high speed or only to reckless the border and 'in the night. Not until 1600 or 1610 in the afternoon would the ' -17', running from Guadalcanal or Cuddahal, be able to take the ship and report the contact to Henderson.
In order to cover the area adequately, Colonel Saunders by October was sending out four planes daily from Espiritu and Henderson Field. The four left Espiritu at 0600, searched 1,000 miles between 294° and 324°, and then landed on Henderson Field. Next morning these same four B-17's would cover an arc 450 miles deep between 300° and 340°, in courses which carried them to within 50 miles of Rabaul. This method afforded efficient coverage, but weather often prevented its use and the group commander was "getting to be an old man from sweating the boys in. 41 In any case, the Express ran on and search over southern Bougainville was made more than ever hazardous when the Jap brought down a fresh and highly trained fighter unit to defend the Shortland area.

It was not easy to hit the Express. The hostile force did not enter the effective radius of action of Marine aircraft based on Henderson Field until late afternoon, which restricted retaliatory attacks to a single mission before nightfall, and often it was impossible to hit the destroyers before dark owing to weather conditions. On occasion, when moon and cloud conditions permitted, the dive and torpedo bombers could continue the attacks throughout the night, but effectiveness of the planes was severely limited on moonless nights.42 Colonel Saunders was at a more serious disadvantage back at Espiritu. By the time a striking force of B-17's could cover the 600 miles to Guadalcanal, the enemy was out of range and dispersed up the Slot, which was the case "most of the time."43
CONSOPAC relied heavily upon the B-17's daily search over the
Shortland area for information on enemy surface movements. At times,
the bombers went even beyond the Solomons. For example, on 2 October
two B-17's flew far north of Bougainville to photograph enemy installa-
tions in Kapingamarangi (Greenwich) Island and gave the area a
strafing.44

Early in October some attempt was made to restrict Jap use of
his Buka field, but in the attack delivered on the 4th, only one B-17
could break through the weather to drop 20 x 100-lb. bombs upon the
strip and parkways.45 Eight days later another raid hit it more
solidly; the bombs splashed along the runway and amid parked air-
craft, 10 of which were assessed as destroyed.46 This time the Jap
was surprised; even one of his two defending Zeros was shot down, but
the final day of reckoning for Buka lay far in the future. These
were at best no more than sporadic raids. The fuel at Henderson
could not pump up a sustained offensive as yet, but notice was being
served upon the Japanese that the B-17's could reach them throughout
the Solomons. On the 13th a flight of six more B-17's dropped 12,000
pounds of heavy bombs on the Buka strip to emphasize this point.

Guadalcanal was not yet secure, not so long as the Express
could feed in a steady increment for the Jap ground forces. Hornet
had gone up into the Shortland area on 5 October and her attack had
hit hard at the vessels in Faisi, preparing for the run south through
the Slot. It was a Sunday punch; good, but not repeated, and the
Express ran on. To devise a better method of halting these shipments, Admiral Ghormley called a conference at Espiritu Santo. The B-17's told him that the ships were gathering at Palu, and he had only a slender force to meet Jap determination. But by impressing Helena, Duncan, and McGalla into Norman Scott's task force, there were 2 heavy cruisers, 2 lights, and 5 destroyers to send out to cover the left flank of the Army convoy en route up from Noumea. Late in the afternoon of 7 October Admiral Scott led out his force from Espiritu and steamed on a northwesterly course for Rennell Island. His eyes were those of the B-17's, covering as always the Jap movements around Bougainville's southern tip.

By 11 October the search planes had their information. Shortly after noon at 1345, COMAIRMAIL One flashed word that his planes from Henderson had sighted 2 cruisers and 6 destroyers, all boiling down the Slot for Guadalcanal and only 210 miles out. During the afternoon, 4 waves of enemy planes roared over Henderson. Approximately 75 aircraft dug at the field; although the enemy lost 8 bombers plus 4 of the escort, he succeeded in hampering the long-range search.

Since nothing further was sighted, Admiral Scott approached his action thinking his opposition was substantial but no larger than the 8 vessels reported to him earlier in the day. Despite lack of information, the resulting Battle of Cape Esperance opened by Helena at 2346 on 11 October was a decisive success for Admiral Scott's force. The Jap was driven off with serious losses; 3 cruisers--
maybe 4—and probably a transport comprised his losses. But the Jap was ready to accept such temporary setbacks.

Search planes flying up the Slot on the 13th saw visible evidence of the damage inflicted upon the enemy.\textsuperscript{50} The B-17's added to the Jap's difficulties when Maj. Nance Whitaker led 3 of his 72d Squadron B-17's over Buka and Lt. Col. Donald E. Ridings, 2 others. A total of 40 x 100-lb. bombs cut diagonally across the runway, destroying 10 aircraft on the ground, plus 1 of the 2 that attacked.\textsuperscript{51} Next day Colonel Saunders repeated the Buka mission. This time 6 planes sent 12 x 1,000-lb. bombs down on the strip to destroy parked aircraft, then moved south to hit at the 36 ships sighted in Tonoalei Harbor. Twenty-two 500-pounders went down on the transports, 1 of which scored a direct hit; of the 25 fighters attacking, 6 were shot down, but before the planes returned to Henderson that night, 1 navigator and 1 engineer had been killed in the action.\textsuperscript{52}

Back on Guadalcanal the Bettys had smashed all afternoon at Henderson, with only slight interference from the Marines' Grummans, the P-39's, or the P-400's. The old P-400's cruised around at 12,000 feet looking up at the Jap formations at 30,000, while the new P-39's struggled up to 27,000 and could go no higher; insufficient warning had prevented the P4F's from making contact in force.\textsuperscript{53} All the fighters landed between 1330 and 1400. While they were on the ground being refueled and rearmed, another wave of bombers came over to drop their bombs at will. There were hits and casualties, both on the field and among the 164th Infantry, then disembarking at Lunga Point.
All day the Seabees of the 6th Battalion raced up and down the strip with their pre-cut Harston mat and with their preloaded dump trucks, each carrying a load carefully measured in advance to fit the size of the expected craters; yet by noon 13 holes were visible in the main runway. Prodigious effort barely kept the field in operation when Jap artillery for the first time began to register on one end of the runway. This was "Pistol Pete," of ill repute to the men around the airfield; when the P-400's prepared to take off to track him down, the mission suddenly was canceled. Scuttlebutt quickly spread down the lines—no gas.

Sometime before midnight on 13 October the Express arrived, and it was a big one. Perhaps 2 battleships were there, with 1 light cruiser and 8 destroyers. First there was the sound of a small plane overhead, then the glare of 3 flares—red at the west end of the strip, green at the east, and white in the center. Every man on the island knew what it meant; what he could not know was how bad it could be. The first shell hit on the west side of the field and the others walked right across in a perfect pattern. For 80 minutes the furious bombardment continued. Heavy shells crashed into the gasoline storage and an ammunition dump, while all over the field the aircraft went up in clouds of smoke and flame. In hundreds of foxholes and improvised bomb shelters, men clung to the ground, cursing, praying, and in some cases, going out of their minds. Past midnight and on into the early morning the shells continued to pour into the area. Not until 0315 did they stop, only to be replaced.
by enemy bombers which flew over the field in flights of three and
bombed until morning. 57

Early on the 14th amid the shambles of the field, Colonel
Saunders led out his remaining B-17's. Although less than 2,000
feet of the runway remained usable, the bombers took off, drawing
70 inches of pressure to do it—but they got off and not a cylinder
blew out. 58 Two of the original 15 planes had been hit by shrapnel
and were abandoned; officers of the 67th Fighter Squadron, acting on
instructions from Marine headquarters, went through these two bombers
to destroy the radio equipment, maps, charts, and confidential papers,
and removed the two Norden sights for concealment. 59 Two other
bombers were left behind due to lack of maintenance and spare parts.
Henderson was useless for B-17's. Over a month was to pass before
they could return. 60

When the heavy bombers had gone, four Navy dive bombers were
left in commission to stop the Japanese task forces now able to shell
Henderson out of existence. 61 And to make matters worse, Pistol Pete
was back again. His first shells fell short, but his accuracy im-
proved during the day. The shells came over irregularly, perhaps two
every 15 minutes, but as fast as the Seabees tackled one crater,
another shell would dig at the same spot, scattering men and equip-
ment. Nevertheless, the men of the 6th Seabees filled, tamped, and
laid their mat, and for a time were able to keep the field, or part
of it, in usable condition. Between the bursts, four P-400's were
hung with 100-lb. bombs. The pilots, parachutes strapped on, waited in a near-by foxhole. One at a time between explosions they would make a dash for their plane, but not always could they reach the aircraft before the next shell was on its way. Despite the efforts of the Jap artillerymen, the P-400's got off, with the shells literally opening up new craters under the tail surfaces as the planes went crazily down the runway. But they did not knock out Pete. The Jap guns were numerous, very well concealed, and were frequently shifted; lack of fuel canceled further efforts to locate them on this day. Every drop of gas was saved for fighter defense.

Jap pressure was relentless. His bombers and fighters struck hard at 1134 and again at 1303, both times without warning and without interception. The bomb craters could be filled, but Pistol Pete punctured the mat too frequently; the Seabees fell behind in their race with the artillery and in the afternoon of 14 October, Henderson Field was out of operation. The situation was desperate and the Marine commanders knew it. A Marine colonel visited the 67th's area. In words reminiscent of the Philippines he warned the pilots:

We don't know whether we'll be able to hold the field or not. There's a Japanese task force of destroyers, cruisers and troop transports headed our way. We have enough gasoline left for one mission against them. Load your airplanes with bombs and go out with the dive bombers and hit them. After the gas is gone we'll have to let the ground troops take over. Then your officers and men will attach yourselves to some infantry outfit. Good luck and good-bye.

 Providentially in September the Seabees had laid out a grass strip some 2,000 yards distant and parallel with Henderson. This field was
rough and short, but it supported the light planes during these critical days.⁶⁵ At 1445 on the afternoon of the 14th four P-39's, each with a 300-lb. bomb, and three old P-400's loaded with 100-lb. bombs took off with four SBD's to strike at a Jap task force off Santa Isabel Island. Six transports were strung out in line astern, well screened by cruisers and destroyers; when attacked they threw up heavy AA fire, maneuvered violently, and not a hit was scored upon them by any of the improvised or regular dive bombers.⁶⁶ Thus more precious gas was spent and the enemy force moved down toward Guadalcanal. Two hours later the same planes went off again on the same mission. Meanwhile, someone remembered the abandoned B-17's. Gasoline siphoned out of the two bombers provided enough for one more mission. This time even the "P-400 klunkers" were loaded with one 500-lb. bomb, with which they staggered and wobbled from the runway. But they made it and cleared the field. The mission cost the 67th one plane over the task force, which received two hits from the dive bombers, and another when the flight returned to Henderson after dark. In landing, one pilot ran off the runway to crash into a pile of metal matting, where his plane crushed a Marine field attendant.⁶⁷

Never before and never again did the Jap succeed so well in destroying aircraft grounded on Guadalcanal as during these mid-October nights.⁶⁸ His Express ran again on the night of the 14th and by morning there was not much left of Henderson Field. Fortunately, the shelling had been of shorter duration than on the terrible night of the 13th. PT boats had contributed to a premature withdrawal of
the warships, but during the night five transports anchored offshore only 10 miles from Henderson field where troops and supplies still were being unloaded. Here were prime targets for the torpedo planes and the strafers. But there were no torpedo planes and no gas for the 57th's strafers.

Gas was on the way, if the defenders of the field could hold out. By mid-morning of the 15th it had begun to arrive, ferried in by C-47's. All day long the big transports came in from Espiritu, each with about 12 drums—enough to keep 12 planes in the air for 1 hour. As each plane landed from its 640-mile flight from Espiritu, it braked to a skidding stop, the drums were rolled out on the ground, and immediately the transport took off again. Pistol Pete saw to that. Even while the transports were ferrying in their fuel, the Marines scoured the beachhead for any stray cache of fuel which might have been overlooked or forgotten in one of the widely dispersed dumps. By the end of the day more than 400 drums had been located.

Now that gas was available there was feverish activity among the ground crews. Battered planes were patched up, pilots belted their own ammunition, and armament crews shouldered the backbreaking task of bombing up the planes without bomb carts. Hoisting a 500-lb. bomb on a truck bed required 10 men. The bombs were hauled to the vicinity of the plane and rolled through the mud into position, where as many men as space would permit crowded under the planes' bellies to fit them into the racks. And all this on an empty stomach—hard tack and cold hash had been the only food for more hours than the men
cared to remember.

Down the beach there were targets, plenty of them. Eight miles distant, between Kokumbona and Dome Reef, five enemy transports and eight DD's were pouring ashore upwards of 10,000 troops of the Second Division; this was no longer harassment or infiltration—it was invasion in force. All day on the 15th the SBD's with the P-39's and P-400's of the 67th dive-bombed and strafed the ships and men along the shore. As fire was heavy and the Jap maintained a constant patrol of Zeros over the convoy, but the results achieved by the 67th were encouraging. One pilot got a probable hit, two others scored hits which damaged two transports, while a fourth landed a beautiful direct hit on a transport which caught fire, exploded, and sank. In addition, there was time to knock down one fighter, but the operations cost one pilot. That night there was more shelling, an hour of it. This time the Jap had lost some of his transports; three of them were blazing hulks on the morning of the 16th.

The task now was to destroy as many as possible of the men and supplies which had been landed and concentrated along the beach and back in the edge of the jungle. Thus the days that followed saw a weary succession of missions which shuttled down to Kokumbona and back to Henderson for rearming and refueling. On the 16th, the old P-400's and the P-39's made seven separate attacks on the Kokumbona area, bombing, strafing, and harassing the Jap with no respite. There was no rest for the ground crews either. By day the Jap still was bombing the field while by night he continued to shell it, using
even the deck guns on his submarines. The 67th's planes were wear-
ing out. On one mission four P-400's were sent out. The first
carried a bomb, but only one of its machine guns would function; the
second had a bomb but no machine guns in working order; the third
and fourth planes had most of their guns in commission but carried
no bombs. Why were they sent out in this condition? "Well, they
would scare hell out of the Japs anyway--keep them running. Maybe
some of them would break their necks diving into holes."  

The Jap was investing heavily in Guadalcanal; to meet him, re-
inforcements began to reach the Marines. On 13 October the 164th
Regimental Combat Team of the Americal Division went ashore to
bolster the Marines, and it was a timely arrival. 75 To help out the
weary fighter planes on Henderson, six B-17's came up from Espiritu
the next day to strike at the transports and their escorts along the
beach, but darkness prevented locating this force in Indispensable
Strait--nor was the target at its reported position. On the 15th,
11 bombers tried again; this time they found the ships. One trans-
port already was afire, probably from dive-bomber attack on the pre-
vious afternoon; 49 x 500-pounders from the heavy bombers possibly
damaged another; in addition, they hit a warship (probably a light
cruiser) and set it afire. The Jap had provided Zero cover for the
unloading operation, but nearly half of his force of 20 was shot down.
The B-17's, badly damaged, all recrossed the 640 miles to Espiritu. 76

The enemy's troops had gone ashore, and although they had sacrificed
much of their heavy equipment, Henderson Field now was only precariously
in American hands. Even while the B-17's were over Kokumbona, an
enemy destroyer stood offshore and shelled the bomber strip. Henderson Field was out for the present.77 Naval and Marine aircraft were
inactive, although the P-400's carried on from the grass strip.

The Japanese apparently were optimistic over the outcome, for a
German broadcast, relying upon a Tokyo report, announced Japanese
capture of two important airfields from U. S. forces in the Solomons.78
Not quite, perhaps, but very close. The Navy had revealed on 16
October that more enemy troops and equipment had landed and that the
field was under naval fire, but little beyond that. A hint of the
highly critical situation lay in the statement of Secretary Knox
that he "hopes and expects" that Guadalcanal could be held.79 A
fuller and surprisingly accurate analysis was presented to the public
by the New York Times' commentator Charles Hard, who assumed that de-
defensive air power at Henderson had been overwhelmed.80 So it was, but
only temporarily. Prodigious effort soon had erased the pock marks
from the air strip and the public was informed that the field was in
use on both 16 and 17 October, but this was a bit optimistic to the
men on the spot. Enemy artillery continued to harass the bomber strip
which was still out of operation on 22 October.81

Despite all his losses—both of aircraft over Henderson and of
ships out in the Slot—the Jap continued to send down the Express.
It came through on the 16th, the 18th, and the 20th; although the
ships were not transports, destroyers and cruisers fed the units
ashore with foreboding and monotonous regularity. Enemy bombers hit
The field almost daily, and all along the line there was evidence that Japanese pressure was increasing. Search planes revealed a growing concentration of combat vessels and cargo ships in the Northern Solomons and in the Rabaul area. An enemy submarine prowling along the supply line into Guadalcanal hit Chester, while converted carriers moved down on the 15th to send their planes against a convoy headed for Guadalcanal. On the ground Jap patrols were testing Marine and Army forces along the Matanikau while fresh artillery took up the shelling of Henderson Field.

The Jap possessed impressive surface strength, but COMSOPAC could only guess at its approximate nature. He did know that it was necessary to scrape the Pacific for every available plane and ship to meet the anticipated thrust. On the surface there was but one battleship (Washington) and one carrier (Hornet) with an attendant pair of heavy and light cruisers. But back in Hawaii, freshly repaired Enterprise and new South Dakota were ready to move out from the dockyards with their escorts. On 16 October the force left Pearl Harbor for the South Pacific and it was high speed all the way.

In the air COMAIESOPAC needed all the heavy bombers he could find. On 15 October, General Emmons had been instructed to relieve the veteran and worn 19th Group, then in Australia, with the fresh 90th equipped with E-24's. As the squadrons of these two units passed across the Pacific islands, none were stopped to provide a reserve for the 8th and 11th Groups. The first squadron of 12 planes of the 90th Group was directed to move to Australia, the second was assigned...
to New Caledonia for temporary duty, and the third as well was authorized to move to the South Pacific to reinforce the heavy-bomber strength under Admiral Fitch if CINCPAC so desired. To further strengthen the South Pacific, on 26 October movement of the 19th Group back to Hawaii was halted by Admiral Halsey, who held all usable B-17's at Fiji to meet the current emergency. Movement of the 90th Group began on 19 October when 12 B-24's left for Australia. Next day additional reinforcements moved out for New Caledonia; 20 of 25 fighter pilots scheduled for General Harmon's fighter squadrons left Hawaii in an LB-30. The second unit of the group to move out was the 321st Squadron, which left Hawaii with eight B-24's on 26 October.

Halsey had contacted General MacArthur as to the latter's need for additional B-24's, and a reply on 28 October indicated the planes were needed in Australia but that aircrews would require training in night operations. A further reason for delaying part of the 90th was the fact that heavy rains in the Moreby area had seriously crippled heavy-bombardment operations, which led General Kenney to believe that for the moment the planes could be employed more effectively in the South Pacific.

In addition to these reinforcements, on 27 October General MacArthur was directed to send eight P-38's immediately to the South Pacific. He was reluctant to let these planes go in view of General Harmon's information that Henderson was inoperable for most types of planes and that there were no belly tanks or mechanics there
at Guadalcanal. Nevertheless he held three B-17’s and eight P-38’s standing by to make the flight, despite strong doubts that the P-38’s would overcome the prevailing headwinds or even maintain visual contact with their escort. General Marshall believed that these planes would be unfit for action by the time of their arrival; upon his suggestion, General MacArthur was instructed to hold them on call from General Harmon.

Already in September, 15 P-38’s had been diverted from Australia to the South Pacific, and by 20 October most of these had been assembled and were flying. General Harmon could report the presence of 6 good P-38 pilots with about 100 hours each and about 10 “real good” pilots under training. He felt that these should provide a “tight little flight soon,” but he did not intend to move the unit up to Guadalcanal until both Colonel Strother and Major McNeese, the squadron commander, agreed that it was ready and until Henderson Field was secure from shell fire. The field was not secure and no P-38’s reached Henderson in October to join the fighter defenses.

To support the surface forces, COMSOPAC had at his disposal on Espiritu Santo a total of approximately 65 patrol planes and heavy bombers. Up on Guadalcanal the Marines had ready for combat 1 TBF and 16 SB’s, but less than half of the total number of fighter planes on the island were in flying condition on the 25th; only 15 F4F’s, P-39’s, and P-400’s were ready. Alone, this strength was not enough; but far to the northwest General Kenney’s planes were harassing Jap preparations for the great thrust by hammering at Rabaul.
and on 24 October Enterprise had joined Hornet northeast of Espiritu.

By day enemy bombers hit Guadalcanal harder than ever before, although the Grumans made it a costly business. In one raid on the 23d, 16 bombers and 25 fighters came over, to be intercepted by 24 F4F-4's and 4 P-39's. The action was brief and decisive; when it was over the Marines had shot down 20 Zeros and 2 of the bombers, without loss to themselves. But Jap plans were inflexible.

Even prior to the carrier action, Japanese ground forces threw themselves against the Marine and Army defense lines around the air strips. The enemy had planned a simultaneous attack from a point along the coast and from another south of the airfield. Originally both attacks were scheduled for the 23d, but owing either to inability to reach the designated positions in time or to misunderstanding of orders, the southern unit did not attack until 2 days later, enabling the defenders to concentrate against each one separately. The first assault came on the 23d as scheduled, and it was no patrol action. This time there were tanks—10 of them—and artillery and thousands of fresh troops to throw against the Marines and the Army defenders. Four times the Jap beat against the 1st and 2d Battalions of the 5th Marines, dug in along the Matanikau, and four times he was stopped. Half-tracks with 75's picked off the tanks one by one as they attempted to cross the river; with the tanks many hundreds of enemy troops were lost.

At dawn on the 24th still another attempt was made. To meet it the P-400's were up to bomb and strafe the enemy lines and once again the enemy attack failed. All through the day the Jap continued
his assaults, pushing at the Matanikau; now he was free of air attacks, for heavy rains which began at 1630 had grounded all planes. Very early on the morning of the 25th another Express was offshore, bringing in reinforcements, while over Henderson Field 5 Zeros arrived at 0800 to circle above the strip, making no effort to strafe it. Soon they were joined by 7 more plus a medium bomber, all apparently waiting for the anticipated landing signal. It did not come. Instead, 8 Grumman left the muddy field and shot them down. Moreover, as the mud dried, heavier planes could take off. During the afternoon 4 separate attacks by SBD’s and P-39’s were delivered against the 2 cruisers and 2 destroyers in the Express. At 1420, Lts. Dinn, Furnell, and Jacobsen in P-39’s caught the ships northeast of Florida Island, barely missing them with their 500-lb. bombs. Two hours later these 3, with Captain Mitchell, were back again. This time Lt. Jacobsen put his bomb squarely on the heavy cruiser. Near misses on the light cruiser added to the damage and both vessels moved slowly off, trailing large oil slicks astern.

Back on Guadalcanal another thrust was yet to come, for now the enemy was in a position to make his attack from the south. Here he struck along the Lunga Ridge, south of the fighter strip, where the perimeter was held by the thin line of the 1st Battalion, 7th Marines (Lt. Col. Lewis B. Puller). On the night of 24 October, shrieking, yelling Japs of the 39th Infantry Regiment attacked in waves, repeating their charges throughout the night. Early on the morning of the 25th, the 3d Battalion of the American's 164th
Infantry (Lt. Col. R. E. Hall) arrived on the line to reinforce "Chester" Fuller's men. Now, on Guadalcanal's "Dugout Sunday," Marines and Army troops, the latter in their first combat with the Jap, together repulsed the final assault. The Jap took his losses, re-formed, then reopened his attacks on Sunday night, aiming them now against the Army battalion. Colonel Hall's men held firm. The enemy could not break through the perimeter, despite all his efforts that night and on into the Monday morning. In small strength he reached the crest of the ridge, then fell back. Six hundred enemy dead lay in front of the Army's battalion alone, hundreds more in front of the Marines; none had come closer than 1 mile to the fighter strip. With daylight three P-400's and two P-39's joined in the rout of the enemy by bombing and strafing the area south of the fighter strip. But there were fresh Jap troops ashore who could carry on against the tired defense lines. Air defense was operating under very serious handicaps, while steaming down from Truk was a powerful Jap force, the greatest yet marshaled against the American positions in the Solomons.

The searchers were out from Espiritu, both B-17's and PBY's. Over east of Malaita, Lt. Mario Sasso of the 5th Group, who was out on his first mission in the area, found one section of a task force on the afternoon of the 25th. He clung to his contact, developing it until his report covered a battleship, several cruisers, destroyers, and possibly a carrier. After he had observed the enemy ships for
over a half-hour, seven carrier-borne Nagoya Zeros engaged Sesso's B-17 in a running fight but they could not shoot it down, despite complete failure of its lower turret and loss of one gun in both tail and upper turrets. One Zero blew apart in its frontal attack—one which cost the life of the B-17's bombardier—and later two others fell away smoking; Sesso's information got through to COMSOPAC. Other search planes revealed similar forces converging on Guadalcanal—destroyers, cargo vessels, battleships.

Search reports reaching Admiral Halsey revealed 3 heavy forces, including 4 carriers, 4 BB's, and 8 CA's, all in the area northeast of the Santa Cruz Islands. Here it was that the planes from Hornet and Enterprise fought out the air action known as the Battle of Santa Cruz Islands on 26 October. Against one of the enemy's surface forces, 11 B-17's were sent up from Espiritu. Nine reached the target area to find a battleship with 2 destroyers, but the 30 bombs dropped from 20,000 feet achieved only close misses against the rapidly moving vessels. A second flight of 5 bombers, out after the same task force, contacted a better one. Three BB's and 2 heavy cruisers were the targets, but the bombs from the 4 attacking planes all missed from 17,000 feet.

The effect of the air action on the Jap was not determined. He had taken heavy damage on one of his best carriers, on some of his latest heavy cruisers, even on an old battleship, but it was "unlikely that the damage suffered by the Japanese in the Battle of Santa Cruz
Islands was immediately instrumental in saving Guadalcanal.

Certainly it was a costly battle for Admiral Halsey. The enemy
retired in damaged condition, but he had caused the loss of Hornet.
Only one damaged carrier, Enterprise, remained to COMSOPAC.

If the Jap advance had been predicated upon capture of Henderson
Field—as the Navy believed—then the Marines, the America's 164th
Regiment, and the few planes on Henderson had saved the day.

Henderson Field, though crippled, was still in American hands. Its
dive bombers, torpedo bombers, and B-39's could hurt any surface
force approaching. The enemy knew this; he retired and in 3 weeks
was back again with weapons which he felt would secure possession
of the field—infantry units.

Thus another battle for Guadalcanal ended. After the Japanese
retirement, the B-17's returned to their daily search pattern. By
27 October General Harmon felt that the immediate crisis has passed
and that the situation did not necessitate immediate emergency dis-
patch of any additional heavy bombardment units from the mainland.
He now had 47 B-17's available of which 35 were ready for combat on
the 26th. Eight B-31's were en route from Hawaii and 7 B-17's of the
19th Group were held in Fiji, but the combat effectiveness of these
latter aircraft and crews was regarded as "problematical." Fort-
unately, it was not necessary to employ these worn veterans of Java
and Australia; after 7 days in the Fijis, the 93d Squadron was sent
into Hawaii on the last day of the month. Nor had General Harmon
held the 90th Group. The second squadron (321st) passed through
New Caledonia on 31 October, and no effort was made to use it in the Solomons. A survey of Harmon's strength by the War Depart-
ment now indicated that the 5th and 11th Groups were operating as one unit, while behind them stood one or more fighter squadrons on each of the island bases. Paradoxically, not one heavy bomber squadron had yet been assigned permanently to the area and two of the fighter squadrons still were attached to the Seventh Air Force.

By November the Japanese realized that nothing short of a major land effort would suffice to dislodge American forces from Guadalcanal. Both sides now were heavily committed to the area, with the enemy still maintaining control over the northern sea approaches to the island, which meant of course that the Express still ran on. Not so easily as before, however. COMSOFAC now had 24 submarines working along the line up to Rabaul and these exacted a severe toll of sur-
face strength. Air operations against Jap shipping increased as the damages of the violent battles of 23-25 October were removed, and the condition of the two landing fields was rapidly improving. On the 30th the usual procedure of naval support was reversed; Atlanta and four destroyers came in to pound for 8 hours at enemy positions back of Pt. Cruz and on the following morning the 5th Marines moved out across the Matanikau. By 3 November they had advanced beyond Pt. Cruz, although news of the approaching enemy naval force caused a shortening of the lines back to the Matanikau.

The defeats of October had caused the enemy to readjust his forces. Captured orders from the 17th Army issued in September
indicated that the major portion of the 30th Division had been earmarked for New Guinea. Now it was to be diverted to Guadalcanal.

On 2-3 November the Express brought in two battalions of the 230th Infantry Regiment plus some artillery units which went ashore east of Henderson near Tairu Point. This was a threat which the Marines checked, and enemy strength was further depleted by heavy naval bombardment of the new landing area, which destroyed stores and ammunition along the beach. Marine raider forces eventually exterminated this force as it sought to move back along the inland trail.\textsuperscript{105}

During this period the B-17's continued their searches from Espiritu. Always six planes were out, and on occasion there were eight to provide a broader coverage. Air opposition had dwindled momentarily, but now and again there was a surfaced submarine to strafe or a flight of float Zeros up the Slot to dispute the search. Nineteen planes dropped 379x100-pound bombs on the supply dumps and concentration area at Kokumbona, but the Jap fed in a fresh regiment at this point some 5 days later.\textsuperscript{106}

The air forces on Guadalcanal now were being put together with the variety of types which marked nearly all future air operations in the Solomons. The remaining F-400's and new P-39's of the 37th Squadron were operating against enemy lines in daily attacks. Some help had reached the squadron late in October when the submarine 

\textit{Amberjack} arrived at Tulagi, loaded as a freighter with aviation gasoline. More important to the fighter pilots, she carried 15 armorers and mechanics who were badly needed, for the daily grind was wearing out the ground crews.\textsuperscript{107}
Flying usually in pairs, the planes bombed and strafed the enemy all around Pt. Cruz, Kokumbona, or wherever activity would be found. Often they teamed with the Marines; a mission of 3 November involved 15 SBD's, 4 P-39's, 2 P-400's, 1 TF and 7 F4F's, all striking at a Jap landing about 1,000 yards east of Koli Point. Furthermore they flew constantly. Some days 4 or 5 missions were run, on others the number was 12 or more. As the newer P-39's arrived they were sent out more frequently as escorts for marine strike forces or as dive bombers to accompany the SBD's.

These strike forces, which varied so widely in type, were the primary weapons to check the Express. On the evening of the 7th, such a force went up to hit a light cruiser and 10 DD's reported off Santa Isabel. It was one of many similar forces; its 7 SBD's each with a 1,000-pound bomb, 3 TF's each carrying one torpedo, 3 P-39's with a 500-pounder attached, and all escorted by 22 F4F's, gave an indication of control problems involved. This mission was successful. TF's sent 2 torpedoes into the cruiser, 1 into a destroyer. The SBD's put a 1,000-pounder on the cruiser. But the P-39's were forced to jettison all their bombs before shooting down 5 float planes which were preparing to attack 2 marine fighters. Four F4F's were lost, although 2 pilots later came back; while the Jap had lost 15 float planes, in addition to damage suffered by his surface craft. All this was the work of an aggregation not yet an air force, but slowly the components were being fitted together.
Along the Metapona River and all around Kokumbona, the P-39's continued to pound away in a daily routine. Pilots strafed every enemy movement and reported back each new enemy position, their work punctuated by the excitement of forced landings and by counting bullet holes in the planes after each mission. Searches from Guadalcanal now were limited to shorter sectors extending less than 200 miles out from the island base, but some of them reached the Buna area. What they found was not reassuring. The Jap was amassed great numbers of ships in the Northern Solomons and at Rabaul. On 11 November the searchers counted at least 61 ships in the Buna-Tonolei area, among them 17 cargo vessels and large transports. Next day COMSOPAC estimated that facing him were at least 2 carriers, 4 battleships, and 5 heavy cruisers, with all the destroyers and transports necessary for invasion on a greater scale than ever before attempted. It was a prime opportunity for the B-17's if only they could reach the lower tip of Bougainville. Twenty-eight of them were available on normal alert back on Espiritu, but the continued lack of fuel at Guadalcanal made it impossible for them to reach the rich target area to the northwest.

To oppose the forces gathering against him, COMSOPAC had nothing like equal strength. His only remaining carrier was damaged Enterprise, not yet ready for action, although repair crews were racing against time in a 24-hour schedule to return the ships to service. Washington and South Dakota were ready, plus destroyers and cruisers, but the enemy theoretically could overpower any force which COMSOPAC
could send up the Slot. Not only did the Jap possess superiority in surface craft; his land-based aircraft were superior in numbers as well. Some reinforcements had reached Guadalcanal from Efate on the 6th, and seven other transports were scheduled to start for the island, but if they could not be escorted and if the Jap should land in force, then retirement from the Lower Solomons would be a strong possibility.\textsuperscript{112}

At 1730 on 12 November the Japanese convoy of approximately 11 transports escorted by an equal number of destroyers left Shortland and proceeded southeast.\textsuperscript{113} Thousands of fresh troops were aboard, enough to swamp the defenders of Guadalcanal. To punch this force down through the Slot, the Japanese had amassed overwhelming surface power. Already enemy aircraft had struck at Henderson Field and at the three cargo vessels which had arrived off Lunga at 0530 on Wednesday morning, 11 November. Eleven Aichi dive bombers escorted by 12 Zeros came down to attack the ships; they damaged \textit{Zellin}, lost 1 bomber and 4 fighters, but cost the Marines 6 Grumman and 4 pilots.

Next day as 4 transports moored off Kukum, the Jap returned, this time with approximately 25 medium bombers carrying torpedoes and 8 Zeros to provide cover. The targets had moved out to sea for better defense, protected by Admiral Callaghan's cruisers. High overhead at 29,000 feet, Capt. Joe Foss held his Grumman concealed in clouds while not far below 8 B-39's of the 67th Squadron circled,
holding their altitude. The bombers came in low behind Florida Island. As they flew across the strait toward the task force, the fighters tore down into their ranks to stage one of the wildest melees yet seen on the island. Struck by devastating antiaircraft fire, as well as by the fighters, one after another the Mitsubishi bombers crashed into the sea or on Guadalcanal, accompanied by 5 or 6 of their escort. Not a ship was torpedoed but the action cost 3 Grumman F4F's and 1 P-39, with 1 pilot from the 67th, who had dived straight down into the sea when his canopy apparently frosted up as he came down into warmer air. The P-39's had not equalled the Marine score, but they had knocked down 1 Zero and a bomber, and by chasing off Jap fighters they had permitted the Grumman to score several additional kills. When the Army pilots returned to the strip, Joe Foss was there to greet them. "You fellows can play ball on our team any day," was his comment.

All this local success helped, yet off to the northwest the Jap was sending down a heavy force containing at least two battleships; should this force break through, the air installations on Guadalcanal would doubtless again be treated to a disastrous shelling. That same night Dan Gallagher took his 2 heavy and 3 light cruisers with 11 destroyers up into Savo Sound to fight out one of the wildest night actions in U. S. naval history. It was costly, seriously so, but the Jap suffered even more keenly. There would be no bombardment of Henderson Field that night.
Round one had gone to the defenders. Another was coming. While Enterprise, South Dakota, and Washington moved out from New Caledonia on the 11th, COMSOPAC rushed efforts to concentrate all possible land-based aircraft in the combat area. Fresh Marine SBD’s, TBF’s, and Wildcats were flown ashore at Noumea on the 11th. General Harmon was requested to send 15 P-38’s and 11 B-26’s up to Espiritu Santo on the following day. Every B-26 in the Fijis was ordered equipped with torpedoes and held in readiness to proceed to Espiritu on an hour’s notice.

Planes rushed across to Guadalcanal from Espiritu Santo on Thursday, 12 November. At 0700 the first flight of P-38’s left Tontouta Air Base for Henderson. Once again, as in August, Maj. Dale Brannon led the flight of 3 planes, with a B-17 providing the escort. Landing at Espiritu after a 3½-hour flight, mechanics discovered that low fuel consumption would have permitted a nonstop flight to Guadalcanal, although fatigue already was felt by the pilots. The second and last stage of the flight was uneventful. Radio reports of an enemy attack caused the B-17 escort to turn back at the south end of San Cristobal, and the new planes went on alone to land at 1530 on the fighter strip just east of Henderson Field immediately following the Jap raid. Servicing was performed by the Marine ground crews just as it had been done in August, for once again the Army ground crews were aboard the escorting B-17 which returned them to Espiritu.
In addition to the P-39's from Tontouta, COMSOPAC added 6
Grumman fighters, 10 SB2A's, and 3 TBF's to the forces on Guadalcanal.
This now gave him a total of 41 F4F's, 30 SB2-3's, 19 TBF-1's, and
2 P-400's. General MacArthur was called upon to send over 8 P-39's.
These planes were flown direct from Milne Bay to Henderson Field
where they arrived on the 13th to remain until 22 November. Furthermore MacArthur was requested to alert 18 B-26's for flight to
Efate, Espiritu, or down to New Caledonia. The 69th Bombardment
Squadron (M) under Major Collins was moved up to Espiritu from New
Caledonia on the 13th, and on the same day the 70th Squadron (M) was
ordered to leave Fiji for Espiritu. Espiritu itself had been prac-
tically cleared of planes when many were flown down to Efate to make
room for the B-26's due in from the Fijis.

Friday the 13th cost the Japanese a battleship. Hiyori, damaged
in the action of the previous night, still lay off Savo Island.
Just before noon she was attacked by 9 TBF's escorted by 6 fighters
coming in from Enterprise to bolster General Vandegrift's air defense.
Five torpedoes struck the ship. A few minutes later, 17 B-17's
arrived over Savo Island, having gone out from Espiritu on a strike
against a carrier and a battleship reported earlier by a B-17 on
search. The target was beyond range and could not be attacked, but
10 miles northeast of Savo the bombers found Hiyori. The big ship
was circling slowly, escorted by a light cruiser and 4 destroyers.
Despite heavy AA fire, bombardiers of the second and third flights
of aircraft placed 5 or 6 of their bombs on or very near the
battleship. Subsequently this vessel absorbed 4 more torpedo hits for a total of 9 and at least four 1,000-pound bomb hits, yet still it floated; at 0220 next morning it was able to throw 14-inch shells at the airfields on Guadalcanal. 123 This bombardment by cruisers, destroyers, and the dying battleship lasted over 80 minutes. It succeeded in damaging one P-38 and 17 F4F's and destroyed 2 Grumman fighters and an SBD with direct hits, but it was a final effort. Next morning an enormous oil slick was visible in the Savo area.

The enemy invasion force was still intact aboard its transports. On Friday morning a B-17 on radar search from Espiritu had sighted 12 transports and cargo vessels with 10 escorts moving toward Buin just north of Vella Lavella. 124 Apparently the Japanese felt that the American naval forces were too far gone to interfere, for sometime after this discovery the convoy reversed its course, heading once more for Guadalcanal.

Early on Saturday morning Enterprise was ordered to attack the convoy and the B-25's were sent on up to Guadalcanal. Already four planes of the 69th Squadron had made a round trip to Henderson with a load of torpedoes for the TBF's; now on the 14th, 10 more medium bombers were sent across to Guadalcanal. These planes comprised the available strength of the 70th Bombardment Squadron (M) under Maj. Leroy L. Stefonowics; six of them carried torpedoes for the TBF's, while four were loaded with two 1,000-pound bombs each. To reinforce the combat zone further, General Harmon was ordered to send additional P-39's and P-40's to Efate immediately. 125
While the Enterprise attack group pounded the retiring bombardment force of cruisers and destroyers, the transports moved down closer to Guadalcanal, closer to the base where land-based dive bombers and TBD's could hit them. The pilots of the eight B-17's up from Espiritu on search that Saturday saw targets, more than they ever had seen before. At 0830 General Harmon reported that his planes had sighted 12 transports some 20 miles directly north of New Georgia. In addition there were escort forces of cruisers, destroyers, carriers, and an advance group of vessels including at least one battleship—perhaps two. 126

On the 14th Captain Johan was off from Espiritu at 0800 on a routine search of sector 310-316. He had completed the left leg, had left Choiseul Island behind on the return leg when he sighted 2 task forces of 20 to 25 ships, including 2 carriers. In the face of very heavy and accurate antiaircraft fire, Captain Johan developed the contact. Amid the hail of flak, 3 M3-109 type fighters, 3 Zeke's, and 1 Rufe attacked the bomber, but the Jap lost at least 3 of his fighters and probably 2 more in the 25-minute running battle which ensued. The B-17 was riddled. Its tail surfaces were entirely shot away. Only by using the crew as ballast was the plane barely able to limp across the 650 miles of sea to its base on Espiritu. However, before it left the scene it had reported accurately to the First Marine Aircraft Wing on Guadalcanal, where the dive and torpedo bombers were made ready. 127
It was now or never, for 6 of the transports were big ones, averaging above 20,000 tons, and the convoy carried a force variously estimated to be from 18,000 to 35,000 men.\textsuperscript{123} To strike at the carriers, 16 bombers left Espiritu in 2 flights, the first at 1018, the other at 1040. En route 1 of the aircraft became separated from the force and returned to base. While the others were flying up the island passageway, land-based Marine and Navy planes from Guadalcanal struck at the transports with torpedo and bomb. When the B-17's arrived, their carrier target was gone, although there was no lack of suitable substitutes. From 17,000 feet the first element of 4 aircraft missed the target, but the second of 3 obtained 1 direct hit on a transport. The second flight of 8 bombers attacked from 20,000 feet, and this time the bombs straddled a seaplane tender. Fifteen land-based Zeros tried to prevent this attack; they suffered loss of 5 and probably 1 more of their number, but caused only minor damage to the bombers.\textsuperscript{129}

At this point the convoy was badly shattered. By nightfall 6 of the 12 transports either had been sunk or were gutted by fire, and only 3 cargo vessels and 1 transport were able to reach Guadalcanal, where they were beached near Sassafronga early the next morning. Torpedo and dive bombers had slaughtered ships and men, while the 67th Fighter Squadron with only 4 planes in operation had provided cover for the strike forces.\textsuperscript{130}

Repulse of the final enemy thrust was all surface action. A few minutes after midnight on the 14th, Rear Adm. Willis A. Lee with
South Dakota and Washington met a powerful enemy force coming in around Savo Island. Although seriously outnumbered by the Jap, the Navy's radar control of its gunnery was superb and served in part to overcome any deficiency in strength. The enemy lost heavily and withdrew from the area with his surviving ships. Throughout the Solomons the Japanese naval units were in retreat. The Jap was forced to move the damaged craft back to Rabaul and even as far as Truk, and his air squadrons were badly depleted as well. Never again did he repeat such an attempt. From this point on the American air and ground forces on Guadalcanal could give some thought to an offensive.

It was difficult to assess accurately the enemy's total losses in the series of actions. Eleven of his transports and cargo vessels were gone, probably 12, costing him some 85,000 tons of shipping. The ships could be counted and named, but their men could not, which led to a wide range of estimates. General Vandegrift believed that upwards of 30,000 men had been lost; other sources placed it at above 20,000. A total of 34 enemy aircraft had been destroyed by all services, of which B-17's had knocked down 11. But the bulk of the damage had been inflicted by Marine and Navy (Enterprise) dive and torpedo bombers. TBF's had placed 16 torpedoes in the transports while the SBD's had achieved 65 direct hits with 1,000- and 500-lb. bombs. The B-17 contribution was more modest. Bomb loads were necessarily restricted by the distance from the base at Espiritu Santo to the targets, and although only one direct hit on a transport was attributable to horizontal bombing, the search reports of the
B-17's had been of great value to Admiral Halsey. The planes could not easily be driven off by Zeros and they could develop their contacts more fully than any other search plane.

Almost as an anticlimax was the destruction of the four beached cargo vessels lying along the northwest shore of Guadalcanal between Tassafaronga and Cape Esperance. Early on the morning of the 15th, one of the P-39 pilots on patrol saw three of the ships already on the beach and a fourth heading for shore. Speeding back to Henderson, he reported the discovery; by 0700 the 67th had five of its planes in commission and loaded with bombs. Twenty minutes later they were off the ground, had picked as their target the last ship to reach the beach, and had dived on it in a successful attack. Two direct hits were obtained, while the other bombs landed very close. When the P-39's left, the ship was afire. Meanwhile naval dive bombers had attacked the first vessel and three B-26's of the 70th Squadron had dropped 6 x 1,000-lb. bombs on the third. 152

The medium bombers obtained one direct hit from 8,000 feet and two more of the bombs landed among the small craft attempting to unload supplies from the burning ships. The P-39's came back again, so did the B-26's; the destroyer Neade added its artillery bombardment, pouring 600 shells into the burning ships for nearly an hour. When nine B-17's arrived over the beach they saved their bombs; destruction was so far along it was not necessary to add to it. A second flight of heavy bombers passed over the area and moved on up to a point above the Russell Islands where two hits were obtained on
a burning transport. Planes from Guadalcanal strafed the beaches, destroying stores and supplies so that the net reinforcement for the Japanese garrison was negligible. During the day Pistol Pete did what he could to impede the operations. On one occasion two craters opened up just behind a P-39 as it was taking off, but two 500-lb. bombs carried by P-39's of the 67th effectively silenced the gun.  

In his attempt to reinforce the troops on Guadalcanal, the Jap had sacrificed 26 ships sunk outright, among them 2 battleships and 2 heavy cruisers. He had spent at least a full division of troops, perhaps 2, and all that reached shore were approximately 1,100 men of the 36th Division. He had inflicted serious loss upon Admiral Halsey's surface strength, but the air strips on Guadalcanal had come through in excellent condition and loss of planes was held to a very low point. Thus ended the last major enemy attempt to break through and crush American forces guarding the airfields on Guadalcanal. Even the ability to strike at Henderson with daylight bombing raids now was beyond the power of the enemy. Not till late in January was he able to place his bombers over the air bases.  

Nevertheless, with customary optimism, spokesmen of the press section of Imperial Headquarters announced early in December that the main naval force of the enemy was again almost completely destroyed. Having by their own estimate similarly destroyed the Fleet on three previous occasions, Japanese spokesmen faced a dilemma, since Guadalcanal remained even more firmly in American hands.
Even while smoke from burning transports on Guadalcanal's beaches hung over the island, congratulatory messages passed from General Arnold to General Harmon and Admiral Halsey for their contributions in the decisive victory. However, it was evident that General Arnold was not completely aware of the operating conditions which had prevailed at Guadalcanal for the month preceding. He read the reports, noted the presence of large numbers of available surface targets at anchor in port or underway, and asked both Generals Kenney and Harmon, "In view of the seriousness of the threat of such large Task Forces well within striking distance of your heavy bombers, why was an all-out attack not made?"\(^{138}\)

General Harmon explained at once that lack of aviation fuel at Henderson had precluded operations from that base, and that the harbor at Suin-i-Tasi lay beyond the range of bombers from Espiritu. Even the convoy attacked within a 200-mile radius northwest of Guadalcanal was at extreme range; yet it was well within reach of the fighters, dive and torpedo bombers, and the reinforcements from Enterprise temporarily based on Henderson. In anticipation of closer targets, a reserve striking force of seven B-17's had been held at Efate and Espiritu on 13-15 November, and to this number must be added the three radar-equipped B-17's held at Espiritu for search and tracking missions.\(^{139}\) Thus an all-out assault was physically impossible at the time.\(^{140}\)

However, with the defeat of the Japanese surface force, it now was possible to strike more frequently at enemy air and ground
installations in the islands to the northwest. On 18 November
Colonel Saunders led a striking force of 11 B-17's and four B-26's
up to Buin, this time flying out of Guadalcanal. For the first
time there was fighter escort all the way; eight P-38's from the
339th Squadron provided cover, flying at 4,000 feet above the bombers.
This was the first joint mission and as in any pioneering attempt,
several operational problems arose. The B-17's and B-26's had come
up to the island on the night of the 17th, but because the fighter
commander was at another field, there was difficulty in arranging
proper coordination. Fighter pilots were instructed to cover the
bombers and prevent the customary Zero frontal attack; they were to
pick off the Jap fighters just as the latter turned into their head-
on approach. However, since the bombers were at 12,000 feet, P-38's
were forced to fly at 16,000, which was an unfavorable altitude for
them. Further to complicate the operations, when the first flight
of five B-17's arrived over the harbor at Buin, the bombs of the
lead plane hung up and the fighters failed to receive Colonel
Saunders' instructions to make a second run.

Results were less than satisfactory. For the first time enemy
float planes dropped phosphorous bombs upon the bombers, although
their aim was wide. P-38's dropped their tanks, attacked the
fighters, and turned for home, leaving the first flight without pro-
tection. But they had shot down 3 Zeros out of 39 which attacked,
the B-17's knocked down 12, and the B-26's bombing from 4,600 feet
counted 3 sure kills and 1 probable. In addition 2 direct hits had
been made on 2 cargo vessels.
The sequel to this mission was the 30-minute running fight which Zeros carried out with Colonel Saunders' plane on its run down the Slot, an action which cost the Jap eight of his number. The pilot and squadron commander (Maj. Allan J. Stewart, Jr.) was killed by a 20-mm. shell, the co-pilot was mortally wounded; with two engines out and the left wing afire, Colonel Saunders safely brought his plane down on the water at Baga Island just off Vella Lavella. All survivors reached shore in the rubber raft and concealed themselves in the jungle until discovered by friendly natives. On the afternoon of the next day a Navy P3Y came up with fighter cover to return the group commander and his crew to Guadalcanal.144

This mission had been something of a trial run and the mistakes of the initial escort mission rapidly were eliminated. From now on the Jap could expect sharper opposition to his attacks upon the heavy bombers, although ideal escort fighters still were lacking. P-39's were inefficient at low or medium altitude while the P-39's were inefficient at high altitude. At the moment there was nothing for the middle air, although P-40's soon would fill that gap. Furthermore, hereafter and with increasing intensity, the enemy airfields could be brought under bombardment. On New Georgia, Lambeti and Munda Point were hit hard on 24 November, and seven B-17's went up to Kahili 3 days later to put 16 craters in the runway and dispersal areas.145 All these missions pointed to the future pattern of operations in the Solomons.
Although General Harmon did not yet possess adequate facilities even to permit employment of all available bombers, there was promise of an air offensive in the future. The series of air and surface actions had broken Jap control of the waters in the Lower Solomons and the defenders of Henderson Field had frustrated every enemy attempt to recover the battered air strips.
Chapter II

THE ORIGINS OF THE EXHIBITION AIR FORCE

By the end of November General Harmon's heavy bombers had been in operation for full months. Almost daily they had gone out from Espiritu Santo, staging through Guadalcanal as often as possible. Sufficient operational statistics had now been gathered to permit an assessment of their achievements and a consideration of the employment of heavy-bombardment aviation in the theater. By far their finest record had been achieved against enemy aircraft, for out of 610 of all types contacted, 124 had been destroyed and 57 damaged. In executing their missions, 21 aircraft had been lost, over half of which were operational losses. Only 6 were lost in combat, although 3 more were badly damaged by naval gunfire while at Henderson Field. Of their personnel the 5th and 11th Groups had lost 101 officers and men, of which a third had been lost on operational flights rather than in combat with the enemy.

Perhaps as important as its record against enemy targets was the list of lessons learned over the 16 weeks of operations. There was complete confidence in the B-17 as a weapon; antiaircraft fire repeatedly had hurt the planes, and so had Japanese Zero fire, both with 7.7-mm. machine guns and 20-mm. cannon, but for the most part toughness of the planes enabled then to return to base. They were durable and pilots respected them. Combat crews observed a marked improvement in enemy fighter tactics since the initial contacts in
July and August. Zero pilots always fought more aggressively over their own bases, and it was believed that fresh pilots with considerable experience were being fed into the Solomons from other fronts. The frontal attack adopted by Zero pilots had caused considerable difficulty. In fact to combat this menace as early as 31 August, General Harmon had requested modification of all 11th Group B-17's after the pattern completed on one of his bombers on 4 August by the Cheyenne Modification Center.

This involved installation of two 50-cal. nose guns, a radio compartment gun, and new waist gun mounts, with larger waist ammunition boxes to provide a flexible feed. The improvements had proved so highly satisfactory in combat that General Harmon requested 30 complete sets by air shipment. Armor could come by water, but the equipment should be 100 per cent complete, with all fittings and adapters—there were no local facilities or materials available. Already in July such modification sets had been shipped by sea to Melbourne, and 30 more were being started immediately for New Caledonia. Harmon was advised to draw upon Kennedy's supply until his own arrived.

Installation of the new armorment had added much to the forward defense of the planes, but the field of fire was badly restricted and it was doubted that anything short of a nose turret would solve the problem. Colonel Saunders went even further. He cited the toughness and aggressiveness of the fighter unit encountered over Guin, where enemy aircraft now seemed much more difficult to shoot down, indicating the presence of armor in the planes. He granted the need for a nose power turret and for armor plating of the entire nose compartment;
had his B-17's been so equipped, several bombardiers and navigators would not have been killed. But beyond this his observations of operations and enemy tactics in the South Pacific indicated that "a radical change should be made in the design of heavy bombardment airplanes," for he believed that "the present B-17 has been developed to the extreme limit. A new heavy bombardment airplane should be built around what we have put in since its conception." Nevertheless, only two aircraft were known to have been lost to enemy fighters; one on 24 September over Buin and the other on 18 November, after a running fight of 70 miles. In most cases formations of three or more B-17's had proved sufficiently strong to prevent serious damage.

If the record against enemy aircraft was outstanding, that achieved by the B-17's against surface craft was less so. Since 31 July a total of 1,163 surface craft of all types had been contacted, of which 60 were attacked with a total of 823 bombs. Of these ships, 4 had been sunk and 15 damaged, exclusive of 9 others believed damaged as result of close misses. General Harmon was fully cognizant of the B-17 bombing record; particularly that achieved during the great convoy battle of mid-November. Even prior to this action, on 22 October, he had presented to Admiral Halsey a statistical analysis of the effect of search activities upon the striking power of the B-17's, concluding that on a basis of 6 planes on daily search, 11 hours per plane, approximately 78 per cent of the total group effort was being devoted to reconnaissance. The remaining 22 per cent of flying time was available for strike missions. Admitting that this approach to
the problem "may be considered as bordering on the academic," General
Harmon nevertheless felt that it well illustrated the necessity for
preserving the potentiality of the offensive effort.

He recommended that an optimum of 25 per cent of the heavy-bomber
effort be established as the maximum for reconnaissance, that a care-
ful survey be made of all equipment and its employment in order to
secure a reduction of the current figure, and that Hudsons be placed
in service to supplement the search effort of the B-17's and B-17's.
Choice of targets too came into consideration. He recommended that the
heavy bombers be concentrated upon important objectives lying beyond
the range of other types of aircraft or upon vital surface objectives
in force at all ranges. But the bombers should not be assigned
definite strike missions against small detachments of cruisers and
destroyers at long range because of the improbability of obtaining
hits on such highly maneuverable targets, except by employment of
missiles in excess of the targets' value.

On 20 November Harmon submitted to SCISSOR another extensive
analysis of the difficulties confronting Colonel Scudder. He had
discovered that the attacks by B-17's on the 14th had resulted in
no more than 1.1 per cent direct hits and could only conclude:
"This was not good." The action of the following day had yielded a
better score; 12.5 per cent of the bombs dropped were hits, but these
had been obtained in part upon a beached transport or on a vessel
lying motionless on the surface.
Certainly Colonel Sanders was aware of his chief's reaction to the results thus far obtained. Early in November General Harmon had informed the commander of the 11th Group: "Regardless of the difficulties and dangers we will have to begin to cause more damage to the enemy if we are to justify the type and volume of effort we are putting into our B-17 operations for long range strike against enemy surface objectives." He did not urge prodigious expenditure of planes and crews, but in view of the remarkably slight loss from enemy aircraft fire, "we must be prepared to bomb from dangerous altitudes if thereby we can materially increase the probability of enemy destruction." It was a pressing matter to increase effectiveness of attacks against surface targets; vital enemy land installations as yet lie beyond reach of any considerable bombardment force and only through his extended tentacles could the Jews be hurt. General Harmon did not feel prepared to accept the doctrine of high bombing with 4-second fuses; yet he believed that he and Saunders should be ready to employ the B-17's in this manner if an emergency should warrant action of a "sacrificial nature." All this was not offered in criticism but in a spirit of examination, trying to advance the effectiveness of the air weapon. "We cannot, . . . accept a limitation to our capabilities but must seek to improve our present and search for new means for his destruction." He even suggested that Saunders consider night employment of radar-equipped B-17's against important surface objectives, where perhaps the 4-second fuse might be used.
At any rate, CONCEPEAC recognized the tremendous handicaps under
which the heavy bombers operated from Espiritu Santo, assuring Sunders
that in view of the advantages of operating from Guadalcanal, "I have
done all in my power to press the development of a proper field there."

What were these limitations which had contributed to the low
score of the bombers? General Harmon reviewed them for Admiral Halsey.
Practically all targets had been at "maximum range and the majority of
them in excess of that range," thus necessitating reduction in bomb
loading. Furthermore, length of missions, coupled with frequent
necessity for exhaustive search by striking forces to locate targets,
induced crew fatigue and strain, which in turn exerted an unfortunate
effect upon bombing accuracy. "The power of bombardment," explained
General Harmon, "is in inverse ratio to the distance to the target."

There were other problems which contributed their share to
reduction of bombing accuracy. One of them was the heavy burden placed
upon the B-17 crews by the requirement for conducting searches, a factor
which he had stressed on 22 October. At times it was necessary to send
up as many as nine search planes, and initially these were not permitted
to carry bombs. Crews begged for bombs, to hit the ships moving down
the slot. In response to their plea the planes were given a half bomb
load (of four 500-pounders), and with radio tanks a full search pattern
was possible. This search obligation varied from week to week; by
the end of November strike missions had been curtailed, but four
searches were running each day up from Espiritu, covering the area to
the east of the Solomons, while two others now went northwest from

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Confined for a distance of 400 miles. These two split Boursinville, but both planes went as far as could. Over the Shortland area the B-17's could expect both considerable flak and fighter opposition; the fighter unit based near Town now was very effective.

General Arnold closely watched bomber operations in the South Pacific, and he was perturbed over the failure to strike in strength at surface targets during the great convoy action of mid-November. Yet in a congratulatory message to General Harmon following the successful recovery of Colonel Sanders off Vella Lavella, he expressed pride in the operations of the heavy bombers.

In the Solomons operations always it was the maneuverable surface craft which defied the bombers. Few bombers had entered the area with much experience against this type of target, and only rarely was it possible to assign in advance specific targets to the aircrews. Even the choice of bomb load was sharply curtailed. During the first 3 months of operations there were only two fuse selections— instantaneous and 1/10-second delay—of which the former was preferred because it would concentre the water some 15 feet before detonation, thereby creating a mining effect in the case of near misses. Perhaps most serious of all problems was the tactical employment of the heavy bombers, a factor dictated by forces quite beyond the control either of General Harmon or the group commander. Colonel Sanders had gone out from New Zealand with bombing plans based upon attacks by nine planes—three flights of three each. In practice he found that it was impossible to apply this technique; not enough planes could be put into the air.
to produce a pattern of nine bombers, nor were there experienced
flight leaders available who could have effected perfect timing. At
Hapititu Laito the air-drome facilities simply would not permit take-off
in sufficient force to produce a satisfactory bombing pattern. There
were no circulating taxiways, and there was no traffic control. Three
months had passed before enough lumber had come in to permit erection
of the control tower, which extended up above the coconut trees.
Hence, "we felt that we were doing pretty well if we got six airplanes
17
together."  

CESEWAG was informed of all these obstacles. It was pointed out
to him that even in November, clearance of 13 B-17s from Hapititu's
bomber strip required 1 hour, while landing the same flight cost an
additional hour and a half if it should return after dark; and all
this time had to be deducted from the maximum flying time (range) of
the formation. Thus Colonel Saunders was forced to revise his bomb-
ing plan to a five-plane Vee, a formation which did not produce the
results that otherwise might have been achieved by larger flights.

Of all bombs dropped against maneuvering enemy surface craft,
slightly less than 1 per cent was classified as hits, although if
these listed as probable hits were included, the figure could rise to
2.5 per cent. Single-plane runs simply were not profitable; the
target vessel could turn and the bombs would land 100 to 300 feet
astern. In the period 31 July to 15 November, only six formations
went over their targets with more than six aircraft, while up to 18
November nine or more bombers never had bombed simultaneously against
one fast moving target; with such facilities it was extremely difficult to hit surface craft under way. General Halsey advised Halsey not to expect high scores from such small flights, stressing that a minimum of nine planes should be employed. Analysis of the number of hits obtained by flights, as against the number of hostile ships attacked, revealed that approximately 20 per cent of all flight attacks had obtained one or more hits on the target and this figure was "disappointingly low."

If the score was low, operating conditions had contributed to it, and General Halsey had no desire to see his figures interpreted as an indictment of high-level bombardment. He was careful to indicate the limitations of the B-17 and to stress its potentialities when properly employed. It was a plane capable of driving its way through heavy fighter opposition to a fixed objective such as the air installations at Kasa Passao, but against maneuvering targets it must be used only in sufficient numbers to produce a pattern which would cover the possible maneuverable area of the vessel attacked. Perhaps this was an expensive employment in terms of hits per bomb released, but nevertheless it was worthwhile against important naval objectives. Despite the low number of hits, there was evidence that the Japanese naval commanders did not relish contact with the bombers, and Halsey emphasized the fact that since 24 August, no carrier had approached within a 500-mile radius of Espiritu. If only Gaucleral had been operable for B-17's and B-25's during the past 90 days, he believed that the enemy would have encountered serious interference with his...
construction efforts at Eniw and Eula, and with the invasion fleet based in the Saipu-Tonolei area. Once these bombers could move into Guadalcanal, then the reduction of enemy naval and air bases at Eniw, Tonolei, Klete, Eniw Passage, and Rabaul might begin. But until that time arrived, heavy and medium bombardment would be unable to throw full weight into the task of defeating the Japs in this theater.

All these problems were reviewed for General Arnold by CINCPAC and a few days later, Hynson praised the 11th Group; it "has been of inestimable value in limiting the Jap naval action in spite of its rather meager box score. Halsey, I believe appreciates this. Certainly Halsey did," he declared—"nuisance at high level bombing." The 3-17 had proved itself against fixed objectives; even though less effective against maneuverable targets, its performance was a matter of degree of effectiveness and "should not be viewed by superficial consideration into attempt ed proof of the heavy bombers' unsuitability for attack on maneuvering surface targets." Once again he centered the reasons for the bombers' score in the South Pacific: "Our weather fields, lack of maintenance and relief combat crews, adverse weather, inaccurate intelligence reports, no opportunity for training due to shortage of fuel, engines and operational necessity, inadequate maintenance of bomb sights and instruments, occasional operational misdirection, and always extreme range"—all these contributed to the difficulties facing Colonel Saunders. To the list must be added the enemy's elusiveness, his knowledge of effective B-17 range, and his propensity to take advantage of weather conditions. Making due allowance for all these...
factors: the results could not be considered as "entirely satisfactory," but they provided an indication of what could be achieved with adequate bases and targets within range of fully loaded aircraft.

The Commanding General, AAF was fully aware that logistical difficulties had circumscribed effective conduct of high-altitude bombardment in the South Pacific. He urged Harmon to make every effort to overcome the obstacles and to apply a minimum of nine bombers against surface targets in order to conserve his striking force for performance of attack missions. Such action, General Arnold reminded COMSOPAC, would "greatly facilitate my task of implementing the various theater commanders with adequate air equipment and personnel." 24

This problem of proper employment of heavy-bombardment aircraft was one not yet fully threshed out. It was incumbent for the local air commanders to match their heavy-bombardment crews devoting so much time and energy to searches, yet no other aircraft on the spot could press home an effective search in the face of air opposition. General Harmon urged COMSOPAC to employ Warriors to supplement the B-24 and B-17's, and that the B-24's be moved forward to Guadalcanal just as soon as conditions would permit. Yet the fact remained that for long-distance sea search, no plane available could match the B-17. Originally it had been assumed that the B-24's would carry out the patrol missions, but the great vulnerability of the Catalina rendered it less reliable. If it approached an enemy carrier the contact could not be maintained—in fact it might never even be made. Enemy radar would reveal the presence of the Catalina and the air combat
patrol would destroy the lumbering flying boat before it sighted the Japanese task force. Three of the first four F6Y's to contact carriers were shot down, while in the fourth instance the plane failed to make the contact. In the fifth, the plane made the contact, sent off its report, then was shot down 19 minutes later. "Contrary to that on the afternoon of the 13th of November, a B-17 made a carrier contact at 260 miles north of Guadalcanal, maintained it for two hours during which time it shot down six aces, and returned."

So tender then that MAJORS of the army bombers to search the area stretching 800 miles northwest of Espiritu Santo. Admiral Pritch raised the B-17's with a significant share in the success of the last two major battles, while Colonel Saunders took considerable pride in their work even though searching for the lost B-17's was not as spectacular as the strike missions. Regardless of the outstanding performance of B-17's in this direction, it represented a diversion from the available striking power and was not a satisfactory situation in the eyes of the air commanders. It was agreed that heavy-bombardment requirements for the South Pacific should be computed on the basis of using B-17's primarily as a striking force, that their use in reconnaissance should be limited to areas where hostile aircraft might be expected. Air search properly should be done by patrol planes, shore-based reconnaissance aircraft and fleet planes, and it was pointed out that use of submarines wherever possible not only would lighten the burden upon the heavy bombers but also would relieve congestion of the airdromes.
It is not difficult to understand the position of OCCINCPAC.

It was self-evident that his most effective weapon of reconnaissance was the B-17, and without accurate information as to enemy fleet movements, Admiral Halsey's counter blows would have been seriously handicapped. Nevertheless in Washington, General Arnold was reluctant to see his offensive strength misdirected. On 26 November he issued instructions that the Plans staff prepare a letter for Admiral King, setting forth reasons why the 63 E5Y's in the SOFAC should be employed instead of the heavy bombers.

On 17 December General Arnold sent his letter to Admiral King, reviewing the problems facing the local commanders of the B-17's, and urging that fuller use be made of the Catalinas in reconnaissance work. He was "seriously concerned" by reports from General Eareckson. While admitting that results obtained by the heavy bombers in the recent air-sea actions had been "relatively limited," he cited the necessity for employment of at least 9 to 15 aircraft in simultaneous attacks upon maneuvering surface targets to achieve success. This had not been done in the South Pacific, where, as he pointed out, the majority of attacks had been by single aircraft or very small formations. Since failure to employ mass strength was not due to lack of familiarity on the part of the theater commander with the basic principles of air employment, General Arnold concluded that three basic factors interfered with proper utilization of heavy bombardment.

First was the dissipation of the potential striking force of aircraft and crews by their employment in routine patrol missions. To
alleviate this condition, the Commanding General believed that fuller exploitation of P-47's, under conditions of acceptable risk, would substantially augment availability of the B-17's. He recognized the justification for an occasional diversion of bombers and their combat crews to reconnaissance missions, but felt that only the anticipated presence of enemy fighters should make this necessary. He reminded Admiral King of a factor which is too frequently overlooked; that successful performance of high-altitude precision bombing missions can reasonably be expected only if the equipment is functioning perfectly, and if the crews are in excellent physical condition and at the peak of technical proficiency. Without adequate rest, sustained practice in bombing technique, and opportunity for maintenance of equipment, something less than successful performance might be expected. General Arnold further pointed to the inadequacy of base facilities, specifically to the delays in completing the program for enlarging and improving the fields at Espiritu Santo and Efate. As a final point, he cited the lack of aviation fuel at Guadalcanal, which prevented staging of strike missions against the concentrations of shipping at Buin and Faisi. But full utilization of P-47's for routine patrol missions would release the land-based bombers for their proper missions.

This effort on the part of General Arnold to secure proper employment of the B-17's did not bring immediate results. Out in the South Pacific General Harmon continued to press the point with
Recognizing that the presence of stiff fighter opposition over Buca and Suin increased the hazard facing the reconnaissance planes, General Arnold reiterated the necessity for conserving the heavy bombers for appropriate bombing operations by reduction of search operations, while his air planners took the following viewpoint: "In this war there will never be heavy bombers in sufficient numbers to justify their indiscriminate use on missions diversionary in character."  

Employment of B-17's on search missions may well have been diversionary, but the information which the planes brought back was absolutely vital to the theater commander and could have been obtained in no other way. Coast watchers were able to observe enemy movements on shore and the arrival and departure of shipping, but only the B-17's could cling to contacts made with large task forces underway at sea. On two occasions in the great November convoy battle the bombers had performed exceptional service in tracking the enemy. The burden upon the Army's bombers was lightened in time, but not until 1943 when the Navy's P3Y's arrived in the theater and not until it was discovered that the P-39 made an excellent search plane for the daylight run over Rabaul.  

How then could the effectiveness of the air effort be improved? General Harmon saw slight hope for improvement under existing circumstances. Only by personal and constant contact with operations could he insure that missions would be planned and executed in accordance with proper doctrine. There was need for a competent
staff which understood the various categories of Army aircraft. Further, to secure maximum results there must be an air commander who understood intimately the capabilities and limitations of his forces. "In short, operational control is the culmination of the whole effort. It is the heart and soul and guts of the whole business and no one can build up a force, train it, dispose it and supply it and be held responsible for its operational effectiveness without some direct contact and influence on its operational control." 35

In practice then, it was evident that General Harmon was being held partially responsible for whatever deficiencies the South Pacific B-17's had revealed in their operations, without being able to wield operational control to remedy the errors. There was a crying need for closer operational control over Army aircraft; in order to achieve it, COMSENCPAC began work on a proposal for the authorization of a South Pacific air force. Already he had outlined a plan for General Arnold. Now on 29 November he submitted to the Chief of Staff his recommendations for authorization of a new Army air force, stating that it had become "impossible for me as Commander of all Army forces to exercise directly the command responsibility of air units that is required and necessary to insure their preparedness, proper distribution and accomplishment of operations to the extent of which I am responsible." 37 He proposed that the new force be designated a part of the command of the Commanding General, U. S. Army Forces, South Pacific, and that Brig. Gen. H. F. Twining be named commander, as the best qualified officer available. The air
force should include a bomber and fighter command whose commanders
would be selected locally. Initially it would be charged only with
such administrative and supply functions as were pertinent to exist-
ing requirements; administrative and logistic responsibility would
remain with Headquarters and Services of Supply of USAFISPA (short
title of Harmon's command). Briefly, under his proposal, General
Twining would be charged with the responsibility under General Harmon
for:

(1) general supervision of all air activities exclusive of
those reserved to SOS and USAFISPA

(2) the distribution of units and forces pursuant to plan of
operational employment as determined by COMAIRSOPAC

(3) all training activities and proper indoctrination

(4) rotation of and plans for replacement of combat and
maintenance crews

(5) command inspection to determine status of training and
proper execution of combat missions

(6) coordination with plans of COMAIR for operational employ-
ment.

In addition the commander should function in an advisory capacity
to COMAIRSOPAC in the preparation of plans and issuance of orders
and as an intermediate agency in the chain of command for operational
employment as determined appropriate by COMSOPAC.38

Implementation of this outline, it was believed, would aid in
eliminating the continued practice of dealing directly with subordinate
units; in other words, it would achieve unity of command.

There was reason enough to cause the air commanders in the South Pacific to seek the establishment of an autonomous air force. All air operations were under direct control of COMAIRSOPAC, who operated from Espiritu Santo. General Harmon had no control over his units and no air organization existed. Both combat and service units were under the commanders of the various island bases who controlled training functions as well as the defenses of the particular base. One of the most pressing problems raised by this arrangement was that of supply, since COMENSOPAC lacked advance information as to when units might move, and therefore he and his air staff were in no position to know what supplies would be required for forward areas.

General Harmon was most anxious to further the development of the air force, urging the Chief of the Air Staff on 6 December to "push it along." Much could be done with an air force working closely with Admiral Fitch, he believed, even though operational control was lacking. As it was, he found "too little imagination being exercised in the employment of our Air Force." Even while the letter was on its way to Washington, General Harmon received a message indicating that the Chief of Staff had not wasted any time in debate. On 5 December General Marshall sent out a dispatch informing COMENSOPAC that the AAF units in the South Pacific were designated the Thirteenth Air Force. No details as yet had been
worked out; in fact Washington had not yet received General Harmon's own outline dated 30 November. But the first step had been taken toward activation of a new Army air force. Once before, early in June, plans for a South Pacific air force had been under discussion, one which would include the "Five Islands" of Canton, Christmas, the Fijis, New Caledonia, and Tongatabu, but the idea had not matured. Only the experience of active operations against the enemy in the South Pacific had brought home to all concerned the necessity for such an organization. General Harmon was enthusiastic over the possibilities arising from establishment of the Thirteenth Air Force. He reported that both Admirals Halsey and Fitch were sympathetic to the idea and that he intended to establish General Twining's headquarters at Espiritu Santo, immediately adjacent to Admiral Fitch who was moving ashore. Thus there should be an improvement in the employment of aircraft arising from the opportunity for joint planning and supervision of activities.

Little time was lost in preparing the ground for the new air force. Constitution of Headquarters and Headquarters Squadrons, Thirteenth Air Force, XII Bomber Command, and XII Fighter Command was accomplished on 14 December 1942 and General Harmon was so informed on the following day. Personnel for the force were to be furnished from units in the field and within the existing authorized strength of the forces under COMSEALSOPOC, although General Harmon was requested to submit to General Arnold his recommendations for 2/0's for the
newly constituted headquarters squadrons. Furthermore it was assumed that he would transfer part of the original fighter and bombardment sections of Force 9465 to the new air force. 45

CONFENSOPAC recognized that command responsibilities of both bomber and fighter command would be restricted because of the wide dispersion of the air units in the South Pacific and the peculiar situation regarding command of island bases. Hence he felt that the headquarters squadrons of the new fighter and bomber commands did not warrant full strength; for them he suggested reduced T/O's. He believed that initially bomber and fighter commands could function in a dual capacity as staff agencies of the air force commander and as command units of restricted jurisdiction and responsibilities; as opportunity for increased operational control developed, he would recommend appropriate augmentation. 46

Thus it was upon these general principles that the Thirteenth Air Force was organized. Already Harmon had considered the problem of reorganizing units in his command, which were operating under old tables of organization; on 23 December the War Department requested his recommendations for reorganization of all air units and associated services operating under old T/O's. 47 Without waiting for a reply and because of the repeated requests which Harmon had sent in, the Chief of Staff granted to CONFENSOPAC authority to reorganize under new tables of organization all units of the Thirteenth Air Force, including associated service units. 48 Activation and further organization of the new air force were delayed a few days pending receipt of final approval from the War Department. When sent, this activation
letter, dated 4 January, repeated the outline of 14 December and sub-
sequent discussions; it was finally dispatched by special air
mail late on 5 January.49

The Chief of Staff had modified some of General Harmon's original suggestions. He deemed it inadvisable to eliminate en-
tirely the fighter and bombardment sections of the T/O of Headquarters, Force 9465; although if these sections were to serve as source as source units, no replacements for them were authorized, nor for any other source units. Furthermore, headquarters of the XIII Fighter and XII Bomber Commands were not to be organized at more than cadre strength, nor could equipment for them be requisitioned until the situation warranted and War Department approval was obtained.50

However it was recognized at the time that a change in the tactical situation might require a standard air force organization in the South Pacific.51

It was obvious that this was to be a field air force. All its personnel must come from sources already under control of COMGEN/SOPAC, who was enjoined from requesting fresh replacements, restrictions which undoubtedly served to hold down the strength in the area to that already committed by the Combined Chiefs of Staff. But a major problem faced General Harmon in his efforts to provide the commanders and personnel who were to operate the Thirteenth Air Force. By the end of December construction of office and housing facilities for General Twining immediately adjacent to Admiral Fitch's headquarters on Espiritu Santo was progressing rapidly, and General Twining
expected shortly to move up to his new command together with Colonels Jamison, McCormick, Strother, "and whenever else he can pick up."52

The key personnel came from USAFISPA, but General Harmon had to inform the War Department that this hard-pressed organization no longer could furnish additional officers to fill the needs of the Thirteenth Air Force, the I and II Island Air Commands, plus a number of service commands scattered over the South Pacific. As a consequence his own staff rapidly had fallen below its minimum requirements, seriously handicapping the conduct of operations in the area. In response to his urgent appeal for increased allotments of personnel, Operations Division undertook a study of the needs of the service organizations; Recognizing the personnel problem facing General Harmon, the Chief of Staff directed on 18 May that the former be permitted to requisition fillers and replacements for the source units. Harmon was so informed on 19 May, but meanwhile the new air force was obliged to begin its operations on a very slim margin.53

On 13 January 1943, General Harmon activated the Thirteenth Air Force,54 and General Twining established his headquarters at Espiritu Santo. Col. H. T. McCormick was designated Bomber Commander, Col. Dean C. Strother was designated Fighter Commander, and the new Chief of Staff was Col. Glen G. Jamison, who had served as G-3 at USAFISPA since July 1942.55 The new air force was stronger on paper than in actuality. No real air organization as yet existed. Hence much of the administrative and supply service of the Thirteenth was carried on by USAFISPA for a considerable time. For example
there was no air service command, that function having been carried on by an air section within Services of Supply, which fortunately was commanded by an AAF officer. Only gradually was the new air force able to assume the position of a self-sustaining unit. Its first Chief of Staff, Colonel Jamison, aptly described the conditions surrounding its birth: "We had no authorization for USAF equipment or anything else, so we borrowed, begged, and stole what we could to establish a headquarters." 56

It was not clear what the new air force could accomplish. Its establishment in no way altered the basic pattern of operational control of aircraft in the South Pacific, which remained as before with COMAIRSOPAO. General Harmon emphasized the fact that the Thirteenth Air Force was distinctly a part of his command and that he must retain direct responsibility for and control of all matters affecting administration, supply, movement, and training; that he retained the right to insist upon observance of sound principles, doctrines, and techniques of employment. 57 For the present, however, the Thirteenth's control over operations must remain upon an advisory basis, dependent in large part upon the relations between General Twining and Admiral Fitch.
Chapter III

FACILITIES OF INTELLIGENCE, SERVICING, AND AIR TRANSPORT

The Thirteenth Air Force had come into existence lacking many of the services which normally were attached to such an organization, with the result that none of its supporting functions were forced to draw heavily upon the Navy. Air intelligence was one of these. On the command level USNISNA had its own C-2 section under Col. Lawrence C. Sherman to which several photo intelligence officers were assigned. These personnel arrived in the South Pacific late in September 1943, but for many weeks they remained relatively inactive down at Auckland. No aerial photographs were available to the C-2 section; the Navy handled all photo work and C-2 received only such information as was passed on to it from Naval Intelligence.

When the headquarters of USNISNA moved to Noumea late in November, the organization of C-2 was established on a firmer basis. Photo intelligence officers established a school for the enlisted men of the section and this training program was expanded to include some Marines attached to Marine Headquarters in Noumea. More significant and valuable was the reception through naval channels of photos taken by naval and Marine units in the Solomons. First-phase interpretation of these was made in Guadalcanal by the forward echelon of the South Pacific Photo Interpretation Unit (SFPUIU), whereupon the photos were sent back to Espiritu Santo for second-phase reports, then on to
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6-8 of USAISPA at Noumea for a further report which were distributed solely to Army units. No tactical use was made of these third-phase reports, but it was felt that the practice was of some value to intelligence personnel.

CINCJFO had directed that all photographic activities should be pooled under the direction of the theater air commander, but both Colonel Sherman and General Harmon did everything possible to establish the integrity of their own photographic effort. Certainly it was evident that existing facilities had been inadequate to meet the needs of the 5th and 11th Bombardment Groups. Colonel Saunders keenly felt the need for a photographic interpretation unit in his own group because of the difficulties he had encountered in receiving credit for hits or damage to surface vessels, even when verified by several aircraft crews. There was difficulty too in complying with routine requests for photographic evidence of the operations of the heavy bombers. In October General Arnold had requested such evidence for publicity purposes; in reply General Harmon found it necessary to point out that the only photographic facilities available in the area were those aboard Curtiss, and that these were extremely limited. It even had been difficult to secure enough photographs to assist Colonel Saunders in his own operations. And since the earlier negatives from Curtiss were sent on to CHISPA at Pearl Harbor, reprints were not available to USAISPA.

General Harmon's proposal to alleviate this situation was the establishment of an air force photo group even though it would operate
under control of COMINCH. He pointed out that the Army had sending photographers and operoers on all its bombing missions and interpreting the results, whereas the 11th Group, with seven B-17s in commission, had neither trained photographers nor maintenance men. This problem of securing equipment and personnel to carry on photographic intelligence upon an independent basis was not new. In October General Erwin began pressing for more adequate equipment. In response to a query he informed General Strettmeyer that his minimum requirement was one photo mapping squadron and one photo reconnaissance squadron, each less two flights and comprising eight aircraft. Shortly after this request went in, Rear Adm. John S. McCain, now Chief of the Bureau of Aeronautics, forwarded to the Munitions Assignment Committee (Air) a request for 18 photographic B-29s and 18 B-26 aircraft. Stressing the need for such planes, McCain stated that their delivery would definitely be delayed against the 1943 allocations of the types to the Navy. If this scheme was impracticable, he suggested as an alternative the assignment of Army photo squadrons to the amphibious forces in the Pacific, although he granted that such a solution properly belonged to the Joint Chiefs of Staff and appeared inexpedient since the Navy already had available trained personnel and equipment.

General Arnold keenly appreciated the need for aerial photography in the South Pacific, but as he pointed out, there simply were not enough aircraft to go around. Each plane modified for photographic purposes reduced the number available for combat allocation and he was very reluctant to divert any more aircraft from their primary
purpose. However, two AAF units presently were organized for assignment: the 17th Photo Reconnaissance Squadron (less one flight) with eight B-5 aircraft, and the 18th Photo Mapping Squadron (less one flight) with eight B-25's. The 17th Reconnaissance Squadron had been reduced by one flight below full strength because of the necessity for holding to a minimum the diversion of B-29's from fighter units. It was scheduled to depart by 1 November 1942, but the 18th Photo Mapping Squadron would not be ready until sometime in January 1943 owing to the necessity for converting the B-25's for photographic work. The intelligence organization was bolstered further by the arrival at Noumea of the 4th Photo Reconnaissance and Map Group on 22 November 1942. This group was the unit from which the various photo intelligence units later were officially attached, although the relation between the group headquarters and its subordinate units was never very close.

With the arrival of these units, there was marked improvement in securing adequate photographic coverage and distribution, although poor equipment had not yet reached the theater. Some doubt existed as to the utility of B-25's in the face of enemy fighter opposition. Early in February, at the time the three original B-25's destined for the 18th Mapping Squadron were in the hands of LCB and ready for ferrying to the South Pacific, the Chief of the Air Staff informed General Halsey that B-25's were reported as operationally unsuited. Since they would operate without escort and were limited to a ceiling of 17,000 feet by their heavy equipment, vulnerability would be high. Therefore it was planned to replace the medium bombers with four B-24's.
which were considered the equivalent of eight B-25's for photographic work.

Harron immediately agreed to the plan for re-equipping the 18th Reconnaissance Squadron. He urged every possible action to speed delivery of the new B-25's at an early date in March, but by 10 February the first plane had just been assigned for installation of equipment. Filling the schedule would depend upon the success of the initial test.

General Twining was highly gratified with the performance of the new units. The 17th Reconnaissance Squadron quickly paid for itself in relieving the heavy bombers of their daily reconnaissance over the Solomons, an operation which had become increasingly costly. Nevertheless it had been a difficult task to convince the Navy of the feasibility of such reconnaissance than done by modified B-25's. General Twining and the group commander, Lt. Col. Charles P. Hollstein, persisted and eventually sent the B-25A's on long-range missions all the way to Rabaul. This action further reduced heavy-bomber losses; altogether, the activities of the 4th Group increased both the quality and quantity of intelligence information.

There still was an inadequate body of intelligence personnel in the area. Admiral Halsey's activation of a combined intelligence center on 1 January had resulted in the absorption of certain echelons of the 0-2 section of USAFICA, which led in turn to a need for an increase in personnel. General Harron requested nine additional intelligence officers, five of whom were to be trained in air combat intelligence. His requirements were quickly recognized and the
personnel were prepared for shipment in February, to be followed by the photo intelligence detachment which he so urgently needed.

Operations in the South Pacific brought all services into close relationship; in some phases of intelligence the amalgamation later became almost complete. On Guadalcanal itself all combat intelligence work had been carried on by the Marines and the Navy throughout 1942. They had provided normal intelligence activities for all the Army units, both fighter and bomber, as well as for their own SBD, SB2F, and P4Y pilots. The intelligence officer of the First Marine Aircraft Wing, Col. J. C. Pumph, USA, had arrived on 3 September with Gen. Roy S. Geiger. Four days later Pumph was joined by two Naval Intelligence officers, Lt. Roger Kent and Lt. (j.g.) S. S. Savage. For the ensuing month these two intelligence officers worked with the 6th Nighter Squadron, briefing them, furnishing the flow of intelligence, and handling their reports. At the same time down on Espiritu Santo two other Naval Intelligence officers, Lt. Cecil J. Burch and Lt. C. C. Colt, were working with Colonel Saunders' 11th Group, which had come out without any intelligence officer of its own. In October these two exchanged places with Lts. Kent and Savage, who then carried on with the E-17's until the arrival of Mr. Concannon show and Capt. Frank Owen of the 6th Group.

The bulk of the collection and dissemination work was done by Lt. Comdr. Ward Cheaney's Naval Air Combat Intelligence Center, which maintained at its headquarters down in Nouméa a pool of intelligence officers. Personnel drawn from this pool rotated through Guadalcanal,
Espiritu Santo, and New Caledonia, remaining in the theater and thus becoming quite familiar with the area. They spent approximately 2 months each at Henderson, were brought back to Noumea, then moved up to Espiritu Santo to serve on Curtiss. Although they were not identified with particular squadrons, they were well trained for the theater and the system eliminated the necessity of sending green men to the forward combat area. Even the intelligence officers attached to carrier squadrons temporarily based at Henderson fitted into this pattern, and it was this organization which subsequently served the Army's air squadrons working out of New Caledonia. Even into January no Army air intelligence officers were stationed permanently on the island, although occasionally some of the intelligence officers assigned to the 8th and 11th Groups would accompany an E-17 striking force up from Espiritu Santo to remain a few days on New Caledonia.

On the island the controlling agency was the Marine air wing. The Marine wing collected target information and target photos, distributed them to the bomber and fighter groups, and at the completion of the mission sent down all reports to Noumea. Normally radio reports of operations were dispatched immediately, followed by a detailed airmail report; since there nearly always was at least one plane each day leaving New Caledonia for Noumea via Espiritu Santo, a reliable flow of combat reports was available in the rear areas.
Host of the difficulty arose at Espiritu Santo. So long as all photographic and combat intelligence work was done aboard Curtiss lying in Second Channel, it was extremely difficult to maintain reliable communications. Often over 2.5 hours would be lost in securing a telephone connection with the intelligence office aboard the ship, which made it most awkward for Colonel Sanders in his operation of the two bomber groups based on Espiritu. Very often the cable line would break or it covered over the coral bottom with the result that for hours all wire communications with shore would be covered; often too the B-17 commanders were obliged to wait 3 or 4 days for their photographs instead of having available a 4- or 5-hour service which they required.

These all were problems which had to be overcome in the growing South Pacific command; that they were overcome is attributable in large measure to the desire of the personnel of the three services to subdue their differences and develop a united team. That there were numerous differences cannot be denied, and the field of combat intelligence was no exception. For example, the G-2 section of USAFISPA was critical of Commander Quakenbush who with considerable vigor had overcome some indifference and lack of understanding within the naval command in his efforts to establish the HSTU. Having created an efficient unit, he was reluctant to accept the development of a competing Army photo intelligence unit. Yet when the new photo unit moved ashore to its quarters only a few yards from the camp of the Thirteenth Air Force, Capt. S. J. Smith of the Thirteenth's G-2
section quickly established a friendly connection. He was invited to work with the SHAEF organization, serving thereafter as an unofficial liaison officer between the two organizations.

Within a short time Maj. Charles Cox, USMC, the directed SHAEF, moved up to Guadalcanal, leaving Captain Smith in charge of the naval unit until the end of March 1943. A most anomalous situation resulted, since the personnel of SHAEF were entirely naval. Yet it was an indication of the method by which service prerogatives were overcome by individuals able to cooperate in the face of necessity. Intelligence offered other examples of cooperation. The A-2 section of the Navy Air Force attended briefings on the Air Corps. And since equipment for training in recognition was lacking, it was necessary to rely upon naval intelligence officers for assistance in this field as well.

Once the naval units moved ashore, as they did in January and February, most of the communications problems were eliminated and the flow of information improved accordingly.

Among the air units in the South Pacific the function of air combat intelligence was something less than satisfactory during the early pioneering days of the Guadalcanal campaign. There was considerable evidence that air commanders neither appreciated the need for proper intelligence nor knew how to utilize the men at their disposal; intelligence officers were too much "surplus baggage." This was particularly true of the 11th Group, some of whose crews had participated in the Battle of Midway and who held the, round intelligence men in low regard. Its original flight to the South Pacific had not included
an intelligence officer, but when operations were begun it was
realized within the group that the S-2 was absolutely necessary.

Capt. George Howard temporarily assumed this duty although he was a
flying officer; in fact it was the general rule throughout the area
that both fighter and bomber squadrons detailed pilots to carry on
S-2 work.

The task of gaining the confidence of combat crew and squadron
commanders was a formidable one which taxed the ingenuity of the small
number of S-2s assigned to the 11th and 5th Groups. Eventually it
was accomplished, but only after much labor. It was a source of some
cheer in the group intelligence officers that the Navy had achieved
a more successful system of air combat intelligence than the local
Army units; specifically, the naval people enjoyed closer cooperation
from the group and squadron commanders. In the original heavy bombard-
ment squadrons the intelligence officers never were admitted completely
into the confidence of the flying officers and they did not participate
to any extent in the planning of missions.

The heavy bombers in the South Pacific operated in a theater where
contact with surface craft was a daily occurrence and proper identification
of these contacts was of prime importance to CSSPAC. Lack of
training in naval recognition on the part of the combat crews continued
to plague the intelligence officers. Warships and merchant vessels
sometimes were confused; so were the types of naval craft. It was
even difficult to convince the search crews of the value of their
information, particularly negative information, and the S-2s took
pains to point out the great value of accurate identification of the vessels which had been sighted. Accurate reporting of the missions was difficult. Some crews understandably displayed more interest in the planes shot down in air combat than in the results of their bombing runs; in any case it was difficult to determine the accuracy of reported results without photographic evidence.

Aircraft recognition was no less important here than in the European theater; certainly it was essential to detect the difference between the enemy’s flying boats and the FBY, but during the early days there was neither equipment nor opportunity for training in this field. As for the record of enemy planes destroyed, General Arnold was worried. He accepted the mounting score at face value; yet it favored the bombers so heavily that several sources began to question the accuracy of the reports, believing that they were erroneously based upon a duplication of claims by two or more planes engaged in the same combat. It was indeed an important point, for as he reminded General Harrison, the entire plan of air operations might materially be affected if errors existed. In reply General Harrison supported the accuracy of his reports, pointing out that a great part of the combat in the theater had occurred between single B-17’s and enemy fighters, a factor which reduced the probability of having more than one crew claim destruction of the same fighter. No enemy fighters were claimed unless seen to explode or disintegrate in the air, or crash on land or sea; furthermore a comparison with naval records indicated only minor discrepancies.
In retrospect, all these difficulties affecting operation of combat intelligence are readily explicable. The proper function of air intelligence, as understood by the Royal Air Force and substantially adopted by the Army Air Forces, had not yet filtered down to all levels of the air forces when the Solomons campaign opened. Both the 5th and 11th Groups had been long in Hawaii where their contact with the growing importance of air intelligence was nearer, and this was also true of the fighter squadrons, which led the Army units out to the Pacific bases. No officers specifically trained for the task had grown up with these squadrons from the earliest days of combat units, with the result that the trained personnel added later were forced to overcome a reserve and resistance before the value of their product was acknowledged by all the squadron leaders. Gradually this phase was overcome with the aid of a few cooperative commanders, and by December the crews increasingly began to frequent the intelligence tents for information. Among these first squadrons there were always a few recalcitrant crews who regarded even post-mission interrogation as too much "nonsense," but as newer units replaced them, intelligence work in the South Pacific assumed a stature more comparable with that in the European theater.

The record of operational intelligence in the Solomons campaign is incomplete without mention of the contribution of the Coast Watchers, whose work was invaluable to the air and ground commanders on Guadalcanal. Their organization had been established shortly after the outbreak of the war in Europe and placed under the jurisdiction of the British and Australian colonial administration. Originally it functioned as
a kind of counter-espionage system, in which the personnel informed
the colonial officers of any evidence of fifth-column hostile activity,
but when the Japanese invaded the Solomons in 1942 the Coast Watchers
assumed a new responsibility. Their personnel were drawn from the
ranks of governmental district officers and plantation operators, men
thoroughly familiar with the topography and natives of the islands as
a result of years of residence in the area. Although it had been
necessary to evacuate some of them from exposed positions, others
volunteered to remain at their posts. These men knew the natives,
spoke their language and held their confidence; several of the watchers
maintained miniature native armies which were armed with salvaged
weapons from crashed aircraft. So far as possible they trained the
natives to watch for pilots who had been shot down and the results
achieved were astonishingly successful. Pilots were carefully briefed
on the precise location of these watchers and also on the location of
all Christian missions. With this information and aided by the
cooperative efforts of watchers and natives, a large number of pilots
shot down in combat were eventually returned to base. Each of
the watchers maintained a radio. As the pilots or aircrews were
picked up by the natives and brought into the coast watch station,
word would be sent back to Guadalcanal where a PBY would be ordered
cut from Raligi to effect the rescue. In some cases native canoes
would furnish the transportation; in others, the coast watchers'
private launch would return the rescued air men.

More important for tactical purposes was the role of these men in
observing and reporting enemy activities throughout the Solomons.
On Guadalcanal Capt. W. F. M. Clemens of the British Solomons Island Defence Force had reported on enemy activities ever since the Japanese had landed in June, and he was instrumental in organizing a loyal native patrol which observed enemy movements and aided downed airmen.37 The organization of which he was a part maintained regular radio connections with watchers on Malaita, Santa Isabel, New Georgia, and at several points on Bougainville, particularly Buka and Biak. While the near-by watchers were most useful for their rescue services, the more distant ones were invaluable for their accurate spot checks on enemy air and sea movements. Located in commanding positions overlooking airstrips or harbors, they lived in constant fear of discovery, yet their reports rarely failed.38 Often they were forced temporarily to shift their location; sometimes like the smiles of Browning's Duchess, all reports ceased together, indicating that the Jap finally had found his quarry. But only until a new volunteer could be slipped ashore to carry on the work. These men knew the Jap Navy; they could accurately report the classes of vessels moving through their field of observation. Of greater importance to the air commanders, they sent surprisingly accurate warnings of air raids against Henderson Field, and their advance notification from the Northern Solomons was indispensable to the defending Marine fighters who required 35 to 40 minutes to climb to the altitude of the attackers.39 After the great air battles over Guadalcanal it was the coast watchers' count of the returning survivors which indicated in part how effective the air defense had been. On New Georgia native assistance was particularly active. Here the scouts enabled the coast watchers in the
Central Solomons to inform Guadalcanal very accurately, not only as to enemy construction, supplies, and movements but also of the exact damage caused by bombing missions. Other observers on Bougainville reported step by step the construction of the airfield at Kahili and the advance fighter base at Buka; moreover whenever possible they passed on their spot observations of the damage caused by bombing missions against these points.

The value of their reports should be weighed in connection with the absence of any radar until September and with the slow rate of climb of the defending fighters prior to the arrival of P-38's. Retention of Guadalcanal was at best only achieved by the slenderest of margins; without the aid of the coast watchers at critical points the margin would have been measurably narrowed. General Vandegrift regarded their service during the early period as one that "cannot be too highly recommended." 41

One activity to which all flying personnel in the Solomons owed a high debt of gratitude was that of the PBY's or "Dumbo's" as they were called with some affection.* Although their normal function was patrol, their ability to land at sea, and to do this in surprisingly heavy weather, made them invaluable in rescue work. Many an Army pilot owes his life to the lumbering PBY-5A. No complete record of Dumbo operations is available, although it is known that

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* The name "Dumbo" originated from the voice call assigned by COMAIRSOCPAC to a PBY which was ordered to Tulagi on 24 December to "operate primarily as a rescue plane." As a result of usage this call became the local designation for all PBY's assigned to rescue work. See note 42.
during the last 4 months of 1942 the PBY-5A's which were based on Espiritu Santo occasionally were ordered up to the Solomons where they remained overnight at Tannahbogo in Tulagi Harbor, performed the rescue mission, then returned to Espiritu the following day. In mid-December of 1942, WP-12, first of the "Black Cat" squadrons, was ordered to the Guadalcanal area to carry on night operations with its PBY-5A's and within 2 weeks its planes had performed two rescue missions of AAF personnel.

In January the Navy placed its rescue service on a more formal basis when it assigned two PBY-5A's with three complete flight crews to Dumbo duty at Halavo Beach on Florida Island, just behind Gavutu. Normal procedure was to base the planes at Halavo for brief periods, 10 days to 2 weeks, then return them to Espiritu. With their radios tuned to the Guadalcanal control channel, Dumbo crews stood by their planes on 20 minutes' notice. At the command from Henderson a Dumbo detail took off, crossed the Sealark Channel, and circled Henderson, where the planes picked up its fighter escort which then led the way to the rescue. In most cases the landing would be made as the result of the efforts of a coast watcher on one of the islands. On occasion the Dumbo would land within sight of enemy airfields and within gun range of Jap warships to rescue Army pilots. Such a dramatic event occurred on 19 January when a rescue plane flown by Lt. C. E. Hoffman, USNR, sighted Capt. S. A. Palmer, commander of the 66th Fighter Squadron, drifting in a rubber boat some 25 miles south of the Shortland area. Two enemy destroyers were rapidly closing the 5 miles which separated them from the PBY as the plane
let down for the landing. While the Navy plane was taxiing toward
Captain Palmer, one of its P-40 fighter escort crashed 2 miles
distant, whereupon Lt. Hoffman immediately taxied over to pick up
his new and unexpected customer before returning to Captain Palmer.
The take-off and return flight were successful; two more AAF pilots
lived to fly another day. 45 The effect of all this upon the morale
of flight crews is difficult to measure; certainly the men who flew
the Dumbo missions felt that they were making a substantial contri-
bution and returned pilots agree. 46

One of the difficulties which beset the new theater commander
upon his arrival in the South Pacific late in July 1942 was lack of
adequate air transport. When finally the problem was overcome, here
again, as in the case of intelligence, there developed a close-
working arrangement with the Marines and to a lesser extent with
the Navy. The necessity for rapid inter-island communication between
the widely scattered bases and the transportation of key personnel
and critical materials, caused General Harmon to request the immediate
availability of a minimum of three C-47's or C-53's. To cover the
long overwater stretch between New Zealand and New Caledonia he
asked for three B-24's as soon as they could be made available,
while three BT-13's or PT models were recommended for the purpose
of maintaining command inspection and supervision of construction
on New Caledonia, Fiji, and New Zealand. His available aircraft in
a suitable category were limited to a few small New Zealand planes
in the Fijis. 47
Obviously the need was pressing. Recognizing it, Maj. Gen. Thomas T. Handy recommended that the B-24's be granted, two from the September production and one from October, but he was reminded that of the estimated monthly production of 10, only 80 per cent of the estimated delivery figure could be used in the allocation charts, owing to excessive optimism on the part of the contractors. Furthermore the request ran squarely into conflict with the Air Transport Command, since the entire production of the cargo version of the B-24, regardless of the number produced, was scheduled for delivery to that command. If any hope for transport planes remained, it was dampened by the statement that commitment to other theaters did not permit allocation of such aircraft to the South Pacific at the time.\(^48\)

Since the transports were not available, perhaps General Harmon's requirement would be met in part by dispatch of smaller types. Accordingly General Arnold offered to send COMGENSOPAC an indefinite number of "puddle jumpers," believing that these would provide transportation for local commanders on island bases and for flights between small islands where the distance was not excessive. General Harmon declined the offer. There were no distances that were not too great for such planes. He lacked hangars for them and the prevailing high winds further ruled them out. What was needed were 18 advanced trainers; six each on New Caledonia, Fiji, and New Zealand.\(^49\)

This time he had more success and was informed that steps were being taken to secure small commercial-type transports. Allocated to
the South Pacific were six Cessna C-78's, which were to be crated for
water shipment on approximately 30 September. These would help,
but they did nothing to relieve the need for planes to cover the great
distances between New Zealand and the forward areas. Once again an
appeal went in to Washington for a converted B-24, and General Harmon
added, perhaps hopefully, that delivery of such a plane would release
one B-17F to the 11th Bombardment Group for its combat operations.
Furthermore this time he asked for a four-engine flying boat or an
amphibian plane to use between bases unable to accommodate land planes.
This latter problem was even more acute. No flying boats were available
to the Army in the South Pacific and General Harmon was totally de-
dpendent upon the Navy, whose FBY's were "as busy as bird dogs." Des-
pite the need, nothing could be done about it; neither a converted
B-24 nor a flying boat could be provided. Harmon was obliged to worry
along with available facilities.51

General Harmon thus far had failed to obtain adequate planes to
meet his needs for maintaining communications, but he had more success
in securing transports for tactical purposes. When the Guadalcanal
campaign opened, enemy domination of the sea approaches to the island
prevented adequate replenishment of critical supplies, or evacuation
of critically wounded personnel to the base hospitals in New Caledonia
and New Zealand by normal surface transport. Distances to the rear
areas were great; over 900 miles lay between Henderson and Tontouts,
while it was nearly 1,200 miles down to Auckland in New Zealand.52
During the critical days of early September, Marine Aircraft Group 25
(MAG-25) began the task of flying its C-47's into Henderson Field, landing the first transport plane on Guadalcanal on 3 September. MAG-25 thus became the nucleus for South Pacific air transport, carrying on alone until joined by some of the C-47's of an AAF squadron in October. 53

In the days immediately following establishment of the service, transports arrived regularly at Guadalcanal to discharge 3,000-lb. loads of P.X. supplies, candy, cigarettes, and miscellaneous items for aircraft maintenance. These planes were equipped with litters; on each trip 16 such cases could be accommodated together with eight sitting cases. As the first transport rolled to a stop at Henderson, it was met on the field by ambulances, patients were hurried aboard, and within 15 minutes it was ready to take off. 54 This procedure was repeated daily, although at times the operation suffered some interference from the enemy. For example on 13 September Jap snipers kept plane and personnel under fire as the patients were being loaded, while on the following day Lt. James V. Walker was attacked by four enemy fighters shortly after taking off for Espiritu Santo. On this occasion the attempt failed; the effort cost the Jap all four of his planes, shot down by Grumman fighters. 55

This was the general outline of operations which General Arnold observed during his inspection of the South Pacific area in September. Apparently he was impressed with the problem facing CONGENSUPAC, for 2 days prior to his departure from the theater he requested the chief of staff to allocate to General Harmon one of the two transport
squadrons then preparing to move westward from Hamilton Field. The other was to go to Australia. Necessity for additional training in overload operations under instrument weather conditions temporarily delayed departure of the 13th Troop Carrier Squadron which had been assigned to the South Pacific. A similar requirement delayed the 33d Troop Carrier Squadron which, together with the 6th Squadron, had been allocated to Australia. All three units were ready to leave during the first week of October, with departure of the 13th Squadron scheduled for the 4th, that of the 33d for the following day. It was well that they were prepared to move out, for the Jap was gathering his strength for a major effort against the defenders of Henderson. As the C-47's moved across the Pacific, General Harmon was authorized to hold the entire 33d Squadron for temporary employment in his theater, a move which disturbed the commander of the Fifth Air Force.

In a discussion of his strategic problems with his chief, General Kenney stressed the point that he could spearhead a drive clear into Madang in New Guinea if he had "fifty more transports that didn't get sand bagged by South Pacific on the way out." He was chagrined to see his transports held up short of their ultimate goal; "That business of grabbing off my ten transports—raised the devil with me," but even as he wrote, Guadalcanal was fighting for its life and the transport of fuel and ammunition by air was about the only reliable supply channel left open to the defenders.

In weighing the needs of the two areas, it was apparent to General Arnold that the foothold in the Lower Solomons was in a
precarious position. Therefore, the 33d Squadron was held to support air transport activities in the South Pacific, although the final three of the squadron aircraft did not leave Hawaii until 22 October. Later General Arnold arranged to augment Kenney's transport requirements, suggesting that Harmon work out an arrangement with the Fifth Air Force whereby he could continue to hold half the O-47's of the 33d Squadron.

Although CONGEOFA PAC now had his 13th Troop Carrier Squadron, which had arrived at Plaines des Gaiacs on 10 October and had begun operations into Guadalcanal on the 19th, he still lacked adequate facilities for movement between his forward and rear bases. Accordingly he continued to press for a C-47, but had no better success than before. Moreover he was informed that arrival of the 13th Squadron and diversion of the 33d precluded any such assignment. However, one result of General Arnold's inspection trip was the prompt assignment to the South Pacific of a number of light planes for local communication purposes. Responding to a request from the traveling Commanding General, 24 small L-4B "puddle jumpers" were prepared for shipment to the South Pacific; beginning 19 October, 4 each day moved out from the factory until the total of 44 (20 for General Kenney) was met.

By October then the transport situation had improved, although it still was far from adequate. When the air echelon of the 13th Troop Carrier Squadron arrived at Plaines des Gaiacs in central New Caledonia, it immediately joined the two Marine utility squadrons.
in the heavy task of supplying the air and ground defenders of Guadalcanal. Back on Espiritu these flight crews loaded their aircraft with bombs, ammunition, and fuel. Flying without any protection whatsoever for a period of over a week following the great Jap effort on 12-14 October, the three transport squadrons helped to keep alive the fighter defenses of Henderson Field with their 50-gallon drums of aviation gasoline. During the closing days of October one plane from the 13th dropped food and necessary supplies to isolated Marine units on Guadalcanal, while frequently others brought out important enemy prisoners as well as the regular shipment of wounded.

Late in November Admiral Fitch (COMAIRSOFAC) took steps to improve the entire transport service. On the 23d he directed the commander of MAW-1 to organize the SOFAC Combat Air Transport Command or SCAT as it was designated by short title, as a separate unit to operate initially under COMAIRWINQ One. At the same time he directed General Harmon to assign AAF "transport squadrons" to the operational control of SCAT. Harmon of course did not have multiple squadrons to assign; he had only one, the 13th Troop Carrier. When SCAT was organized in December, this squadron joined the Marine units and henceforth operated under their control.

The ground echelon of the 13th did not arrive until 24 November; prior to this date the burden of maintenance thrown upon the air crew was extremely heavy. The mechanic who accompanied each plane to the theater was compelled not only to fly every hour his plane flew, but single-handed he had to perform all necessary routine maintenance.
Not until 17 December were the air and ground echelons rejoined, and from that date forward, the squadron operated from Tontouta Air Base, near which a camp was established. Even then the mechanical section of the squadron was obliged to perform all echelons of repair, inasmuch as the Thirteenth Air Depot had not yet been established, and to keep the planes in the air extensive improvisations were devised by the personnel.

In the period 10 October to 3 September 1942, only two aircraft were lost. One took off from Henderson Field on 15 January and no further contact ever was made with this plane. The other loss occurred on 20 October 1942, when failure of his radio compass forced Capt. Cecil E. Petty to land his transport loaded with 19 sick and wounded Marine and Navy personnel on D'Entrecasteaux Reef. After 11 days on the reef, exposed to the open sea, the party was rescued by the destroyer Barton but a week had passed before the plane was sighted, 2 more days elapsed before the rescue was made, and then it was accomplished only at a cost of three PTY's which were smashed up during preliminary efforts at rescue. 66

Even though the 13th Squadron now operated at maximum capacity, transport service was far from adequate. General Kenney's protests against diversion of his 33d Squadron were so strong that by 2 November six of his planes already had been released and General Harmon was planning to forward the remainder shortly. One plane from the 13th Squadron was lost while operating under SCAT, five others remained attached to the Marine group, one was in Fiji for service between that point and Tonga and for emergency runs to New
Caledonia. The remaining six were subject to call for ferrying emergency supplies to Guadalcanal and Espiritu Santo. Thus all transports were fully occupied; even had they been free, none of them were quite adequate for the long flight over open water down to Auckland. They managed to cover this 1,100-to 1,200-mile distance carrying a maximum load of freight and personnel, but it was obvious that General Harmon felt the air crews battling the Jap in Guadalcanal deserved something better: "The weary combat crews would just a bit rather have 4 engines on the long haul to Auckland and back."

This was, if anything, a cautious statement of the case. General Harmon stressed the fact that continuous operation of twin-engine aircraft over water where the distance was in excess of 1,100 nautical miles "cannot be considered a desirable practice." Yet this was the unavoidable pattern of operations. For safety purposes, as well as to maintain the schedule, he operated the C-47's over the New Zealand run in flights of two planes each, but this did not serve to shorten the distance. Furthermore, none of the planes were properly equipped for the work. New main fuel tanks were required to replace the paper auxiliary tanks, which had been carried inside the fuselage since the squadron arrived in October. Their type B-1A drift meters were unsuitable for night flying because of the navigators' inability to see the flare's smoke at night. More serious was the lack of automatic pilots. C-47's of the squadron never had been equipped with the Sperry Type 3-A automatic pilot, with the result that pilots often flew 150 hours per month without any relief by mechanical pilots. It was a heavy and in part a needless
strain upon personnel; to relieve it a place was made for the additional equipment, which was regarded as "absolutely necessary."\textsuperscript{70}

The problem of obtaining adequate transport was closely linked with that of furnishing relief for war-weary crews. Both fighter pilots and bomber crews had been forced to carry on almost continuously, although the burden upon the five heavy bomber squadrons of the 5th and 11th Groups was more severe than upon the fighters. By November General Harmon could only describe the condition of the bomber crews as "more and more rapidly approaching the point of exhaustion."\textsuperscript{71}

In order to alleviate this situation, a rest camp or "aviatorium" was established in Auckland, New Zealand, to which by 2 November nine crews had been sent, including Colonel Saunders.\textsuperscript{72} It was planned to move two or three crews every 3 days, a rate which would leave the combat crews in action for a minimum of 6 or 7 weeks, totaling approximately 160 hours of flying time. But even this schedule could not be maintained in face of the heavy demands for ferrying supplies up to Espiritu and Guadalcanal. Furthermore such an arrangement involved the use of two C-47's to move three crews whereas General Harmon felt that a C-87 would carry three at once, and in addition provide more comfort for the personnel.\textsuperscript{73} Then there was the ever-present requirement for transport between the bases; so once again a plea went in for a C-87. One such plane immediately available with another to come along later would go a long way toward accomplishing relief of combat crews and meeting administrative requirements for transportation. General Harmon
hopefully pointed to the C-87 used by General Jutes on his trip to the South Pacific, then available at Hamilton Field, adding that "nowhere in any theater would it prove more valuable than here in the South Pacific area—there is an awful—used advisedly—lot of water as you know." 74

Despite the great need for the larger transports, General Arnold could do no more than refer back to the basic cause of the problem: the production of only eight C-87’s per month was insufficient to care for all the vital supply lines. As for the C-87 referred to them at Hamilton, it had been borrowed from ATO for a special mission. Even before he had received this reply, CONCELSOPAC sent in another appeal on 8 December. Now he asked for three troop-carrier squadrons; the available C-87 organization was "woefully inadequate" to carry out its transport functions of evacuating all wounded and sorely sick from Guadalcanal. He wanted at least three C-87’s primarily to move the combat crews down to New Zealand for a rest—“God knows they need it.” 76 Under prevailing conditions, it was impossible to maintain a regular schedule.

In Washington it was difficult to ignore these pleas but they could only be balanced against the needs of other critical areas. Knowing that General Arnold had placed the allotment of C-87’s for the South Pacific upon a high priority, General Harmon could do no more than continue with his available resources. 77 By February he was informed that a C-87 had been set up for assignment to the South Pacific, and further, that the Air Transport Command had been directed
to aid in moving the combat crews down to New Zealand. This latter plan already had been recommended to Maj. Gen. Harold L. George of ATC. COMOPAC had suggested that ATC route both east- and west-bound planes through New Zealand and New Caledonia on a basis of two trips each week. Furthermore, he hoped to persuade ATC of the necessity for running an occasional plane through Tongareva, Aitutaki, Tongatabu, and Norfolk, to "keep the detachments alive," for these were bases well off the main line and it was essential that priority supplies, personnel, and mail be brought to them.

The proposal was regarded favorably. A representative was sent out from ATC to discuss plans for sending a transport to the smaller islands once every 3 weeks and to arrange for a service to New Zealand through New Caledonia. But General Harmon was reminded that the extreme shortage of transport aircraft for transpacific operations made it imperative that any diversion from through service be held to a minimum. By 8 January however, General George was able to inform Harmon that instructions were issuing to send one C-57 with necessary personnel to New Caledonia to begin the service to Auckland and that additional service for the theater would be provided when production made it feasible.

Not much more could be done to improve transport facilities under prevailing production shortages. General Harmon saw an urgent need for one section of an air ambulance squadron to provide for air evacuation of wounded from Guadalcanal and his request was immediately honored; the newly activated 601st Medical Squadron
including one transport was ordered at once to Noumea, with five flight surgeons going by air. 81

He also attempted to procure some cub-type air ambulances for use on many of the island bases where the fighter strips were widely separated from hospitals and where the size of the island often placed units at considerable distance from hospital facilities. Eight were requested, but the plan failed owing to lack of any type of plane which had been modified for ambulance work. Harmon was advised to utilize as ambulance aircraft some of the 24 L-4B planes already in his theater or the two L-1A's then being prepared for shipment. 82

The 801st Medical Squadron, Air Evacuation Transport immediately joined the work of evacuation from Guadalcanal upon its arrival in the theater. Five medical officers had left Hamilton Field on 28 December, under Capt. James E. Crane, MC. By 10 January Capt. James Vandyk had flown into Guadalcanal for an evacuation trip with 16 patients, thus becoming the first medical officer of the unit to enter the combat area. Three days later the 801st suffered its first casualty with the loss of Lt. Burton A. Hall, MC, who was making his first flight. 83

During the critical days of the campaign, air evacuation was on an emergency basis. When a C-47 landed on Guadalcanal each field hospital rushed its patients to the strip, where they were loaded aboard the transport more or less on a basis of "first come first served"; neither facilities nor time were available to segregate
the patients as to priority. Nor were the planes equipped with sufficient rubber rafts or adequate food and water to provide for all personnel in case of a forced landing at sea. Despite these shortcomings, pilots occasionally left Henderson with as many as 25 patients in addition to crew and attendants. 84

It was customary to send one flight daily direct from Tontouta up to Henderson Field, while the others went up over Efate and Espiritu, where they remained overnight. By leaving Espiritu at 0200 the following morning, it was possible to arrive at Henderson about daybreak, which was regarded as the safest period and also permitted the planes to return to Espiritu or Tontouta on the same day. Returning, the great majority of flights were made direct to Efate, where there was an 850-bed naval hospital and eventually the Army's newer 48th Station Hospital, which could accommodate 500 patients. 85 Three to five C-47's made the flight each day, although occasionally even more would bring out the sick and wounded. By 10 February, 6,504 patients had been evacuated by the AAF and the Marines; of the first 1,000 the death rate in transit had been approximately 1 per cent, a loss regarded as quite favorable in view of the primitive nature of the operations. 86

Not long after arrival of the main echelon of 801st Medical Squadron on 14 January, air evacuation was placed upon a sounder basis. On 15 March 1943 a medical department of SOAT was officially organized, and in this new unit Marines and 801st Medical Squadron pooled their personnel. 87 Yet it was questionable whether this more
or less prosaic event was as significant in the eyes of the troops on Guadalcanal as the appearance of an Army nurse on Henderson Field. On 1 March the first nurse flew into Guadalcanal, accompanied by a Marine flight surgeon, to create "nothing less than a mild sensation." Thereafter, nurses participated regularly in evacuation flights. 

Throughout the Guadalcanal campaign, aircrews of the 13th Troop Carrier Squadron continued to supply Henderson Field and to remove the sick and wounded. The identity of the squadron was partially lost in the larger Marine organization, but its service was vital. In reviewing the campaign whose initial assault he had led, General Vandegrift paid high tribute to the men who flew in the ammunition and fuel during the violent days of October and November. They had flown in, day after day, with no protection whatsoever and they had "saved us innumerable worries as to critical supplies."
Chapter IV
SUPPLY AND MAINTENANCE

AAF units operated throughout the Guadalcanal campaign without benefit of an Air Service Command within the theater. Nevertheless, General Harmon's responsibility for supply was broad. It extended not only to all Army units and to all bases but even to the provision of rations for all shore-based naval units. It was indeed fortunate that in selecting an officer to organize the supply section of his USAFFE command, COCOMSOAPAC could choose a regular Air Corps officer who would understand the needs of the air units within the theater. The officer was Col. Robert G. Creeve, who later as a major general, commanded the Services of Supply within the theater after that organization had been established in March 1943.

The supply and service problem was two-fold. First, and most important, was the necessity for moving materiel to the theater and placing it on shore; secondly, there was the problem of what to do with the items once they arrived on the docks at Noumea. Originally, Harmon had been instructed that his source of supply was San Francisco, but as a result of operations in August and September it was quickly realized that Hwaii was a more advantageous supply point for air force supplies. Initially there was some confusion; but within 10 days after the landings on Guadalcanal, General Harmon had requested that Hwaii be available as a source of supply for emergency...
requisitions for the South Pacific air units, and General Arnold immediately concurred. Two months later the Chief of Staff strengthened this authorization by advising General Emmens that pending establishment of depots and adequate stockage of all classes of supplies in the South Pacific, Harmon might call upon Hawaii for such assistance as might be feasible and necessary in light of an emergency. In December this plan was developed further when both Generals MacArthur and Harmon were advised that all their requisitions for AAF parts, supplies, and equipment would be channeled directly from their sources into the Hawaiian Air Depot. Equipment on hand would be sent either by air or water; equipment which was not on hand or which might be shipped more quickly from the mainland would be drawn from the Air Service Command at Patterson Field. Yet General Somervell later informed Emmens that it was not planned for Hawaii to supply the South Pacific air units with all types of supplies. Only those items capable of air shipment were to come from Hawaii, while heavier equipment should be drawn from Patterson Field for shipment through San Francisco; and it was emphasized that shipping was not available for movement of supplies from Hawaii to the South Pacific and Australia.

However, selection of a source of supply was only one part of the problem, perhaps the smaller part. More difficult was the task of moving supplies out to the islands and then transferring them ashore. While it was true that an acute shipping shortage prevailed, it was also true that available shipping was not always wisely
employed. Port facilities at Noumea were highly inadequate; a vast amount of construction of wharves, docks, loading and storage facilities, and roads was necessary at the very time that the transport burden was extremely heavy.\(^7\) It was not uncommon to find between 20 and 30 cargo vessels lying in the harbor, and at times the number reached 70 or 80. Moreover some of them lay at anchor more than 3 months before they could move alongside a dock. Up at Espiritu and Guadalcanal conditions were much more primitive, continuing so, long after improvements had been made at Noumea. At Espiritu it was reported that some vessels lay in Second Channel over 3 months before they could be touched.\(^8\)

These conditions were exasperating to the field commanders, but initially there was little control by the Army over the whole question of shipping. At Noumea, for example, it was estimated that the port could discharge 24 vessels per month when properly scheduled, yet twice that number were dispatched without regard to schedule or accumulation. In consequence, during the month of November there were instances when 23 cargo vessels were waiting to load or to be unloaded, and this explained at least in part why shipments of AAF supplies were so long overdue.\(^9\) Investigation of the situation placed responsibility for these conditions with the Naval Transportation Service and Naval Operating Force. To alleviate the delay, General Wylie, Transportation Corps presented the facts to the Joint Chiefs of Staff, with the result that a directive was issued placing responsibility for the unloading of vessels in the Transportation Corps, a practice which prevailed in other ports.\(^10\)
Meanwhile, additional difficulties continued to crop up. Vessels were sent out with heavy deck loads whose weight exceeded the capacity of the ships' own unloading gear. Some radar units, for example, exceeded 20 tons per package, yet the ships' cargo booms could handle nothing beyond seven tons. There were no cranes alongside at Espiritu, so the vessel, with its vital cargo stored away in the hold, would swing at anchor in Segoni Channel for many weeks. This practice led to serious shortages of B-17 engines which were badly needed by the 11th Group. It was later reported that at one time 75 engines were on a ship at Noumea waiting to unload part of her cargo at that point. After 3 weeks' delay in unloading, it still was impossible either to unload at Noumea or to move the vessel up to Espiritu for delivery of the engines.

Fortunately it was possible to deliver fighter aircraft which already had been assembled. At Noumea planes could be swung ashore on the dock, although it was necessary to remove the wings. Road surfaces and clearances permitted this type of handling in order to move the planes to nearby Magenta Field. The original planes of the 67th Fighter Squadron (P-400's) were trucked from Noumea over a 35-mile hilly road to Tontouts, although later it was possible to carry the aircraft some 3 or 4 miles to Magenta Field, where wings were attached as was done with P-39's. The field was a small strip, adequate only to get the planes in the air so that they could be flown to Tontouts, but its use eliminated the slow haul over the hilly country.
Paradoxically, it was even simpler to land completely assembled fighters at Espiritu than at Noumea. At Pallikula Bay, three 50-ton self-propelled barges in addition to four 10-ton walking cranes were available, and the dock was only 200 yards from the airfield to which it was joined by a satisfactory taxi strip. Despite the fact that all types of assembled fighters could be launched at Pallikula, General Harmon recommended that planes normally be handled at Noumea because of the central location and more adequate maintenance facilities.¹⁴

All these physical difficulties gradually were smoothed out; by the end of November COMSOPAC anticipated definite improvement in fuel and airdrome facilities on Guadalcanal. In marked contrast with earlier days in the area, he could advise General Arnold that "We are getting pleasingly fat on service forces..."¹⁵ This was the culmination of a long campaign by the Pacific commanders for more service personnel. Even prior to departure from Washington in July 1942, General Harmon had foreseen the necessity for an air service element in New Caledonia capable of performing fourth echelon maintenance. Specifically, he requested an air depot group rather than an air service group. Despite the fact that the air service unit could be made available within 30 days, whereas no air depot group would be prepared for the South Pacific until sometime in 1943, Harmon was reluctant to accept the smaller unit alone, although it too was needed immediately. Only the depot group could perform fourth echelon repairs; without it he feared that a substantial portion of his air
strength would remain out of commission. Furthermore, shortage of shipping would render unsatisfactory any arrangements to place the burden of repair upon facilities in Australia.  

General Arnold was sympathetic with Harmon's problem and approved the movement of a unit, the 15th Air Depot Group; although he specified that it should be in accordance with existing schedules. Shortly thereafter two air service groups were authorized by OPD, the 6th for New Caledonia, and the 29th for Fiji. The unit was scheduled to be ready by approximately 1 September but it was delayed. By October there still were no facilities in the South Pacific for fourth echelon repair, and it was necessary to follow the awkward procedure of sending such work over to Australia. Even as late as November General Breene was advised to send all engines requiring complete overhaul either to the Hawaiian or to the Sacramento Air Depot, a plan necessary until arrival of the 15th Air Depot Group which would permit overhaul within the theater.

In September General Emmons had found a serious shortage of engineering and air base groups in the South Pacific. In many instances combat troops were compelled to do a "tremendous amount" of construction and non-combat work, activity for which they were neither trained nor equipped, and which properly should be done by airbase groups. General Arnold discovered a similar situation during his inspection trip to the area in September, when he found "crying need" for a mobile depot to be located somewhere in the vicinity of New Caledonia. Furthermore, he personally saw the urgency for
dispatching additional base personnel. He found that the Navy had "moved in without any base personnel anywhere" and now the Army had sent in its tactical units in advance of such service people. Consequently he urged General Stratemeyer to expedite action all along the line. 21

Col. L. B. Whitten, Director of Base Services, was sensible of the special problem in the South Pacific; in recognition of it he had recommended to the Director of Military Requirements that higher priority be given to overseas movement of service organizations. In an attempt to speed movement of the three service units then in the staging area on the West Coast, an effort was made to have OPD assign a higher priority to these units, but OPD did not accede. 22

Colonel Whitten went further and urged assignment of a minimum of two transport squadrons, pointing out that the acute lack of water transport in the area, all of which was under naval control, made air transportation imperative. There was some promise of eventual and partial independence in the matter of surface transportation facilities. By October approximately 50 utility cargo boats were under procurement for the AAF. These were 95-ton craft 150 feet over-all, the design of which Colonel Whitten had requested and approved as suitable for inter-island service in the South Pacific. General MacArthur also had need for such a vessel and 11 of the number had been allocated to the Southwest Pacific, including the first 3, the delivery of which was anticipated toward the end of the year. 23

Because of the urgency in the South Pacific, OPD was consulted with
the view of diverting one-half of these to General Harmon.23

While the 13th Air Depot Group was preparing to sail from San Francisco, an attempt was made to divert it from the South Pacific. Its strength was 747 enlisted men and 41 officers, a size regarded as too great to preserve its mobility. Therefore OFD advised General Harmon that some consideration should be given to locating the unit as close as possible to the center of operations in the South and Southwest Pacific.24 Specifically, it was suggested that since Harmon was being furnished with two service groups, which were similar to sub-depots, it would be more feasible to combine the new unit with similar groups already in Australia. Thus there would be a large overhaul depot in Townsville, one which could serve both the South Pacific and General Kenney's air forces; and most important, it could be functioning at a much earlier date "than one erected by you from scratch."25

But General Harmon was not starting from scratch. He already had underway a preliminary survey, and foundations for the shops even then were being prepared. As early as 11 August he had recommended that one officer of the promised group be sent out by air with plans for minimum necessary construction for the air depot.26 One month later this advanced engineering detachment of the 13th Air Depot Group reached Tontouta to confer with Breese and Harmon regarding a site for the physical properties of the air depot. The final choice was General Harmon's. He selected the site on 1 October, and 10 November was established as a deadline for completion
of the foundations and floors of 10 shop buildings, the work to be accomplished by the 311th Engineers.\textsuperscript{27} Once again Harmon cited the shipping problem which would interfere with the plan to send engines to Australia, and he restated the need for placing the depot in New Caledonia.\textsuperscript{28} OFD was convinced. It informed Harmon that the 13th Air Depot Group would sail early in November, accompanied by the two service groups, each of which was capable of supporting two combat groups.\textsuperscript{29} A similar air depot group was being readied for dispatch to Fiji, and COMGHENSOPAC was granted authority to shift the destination of the groups as he deemed appropriate. After many weeks of preparation the 13th Depot Group, plus the 6th and 29th Service Groups, sailed from San Francisco on 3 November, reaching Honolulu on the 22d.\textsuperscript{30}

COMGHENSOPAC was ready for his new units. Concrete foundations for the shops had been completed 10 days prior to the arrival, while two large hangars were partially erected. He planned to send one service group (the 29th), originally destined for Fiji, up to Espiritu Santo where he felt the need was greater. To ease the repair problems at Fiji he planned to make up a special unit from parts of the two service groups, a move which violated organizational practice. But General Harmon had discovered very early that the nature of island warfare had prevented rigid maintenance of unit integrity of combat or of service organizations located on the widely scattered bases; therefore COMGHENSOPAC stated "we will just have to cut our cloth as it comes."\textsuperscript{31} For unit esprit he was forced to substitute force esprit. In general, many small units met the requirements better
then fewer large ones; and in handling his scattered fighter squadrons, he suggested that an organization on a flight basis would increase flexibility. On the same principle he intended to break up the service squadrons and shift their fragments from point to point as needed. South Pacific warfare could not be waged by adherence to the rule book.

One of the major difficulties in the South Pacific was the lack of ground service units to provide for the needs of combat squadrons which had been separated from their own ground echelons. The experience of the 11th Group and of the 67th Fighter Squadron on Guadalcanal, where combat crews often performed their own service work, indicated that something less than full efficiency of operations was being achieved because of this lack. Headquarters in Washington were aware of the requirement, and informed Herson that a number of airbase squadrons were being planned for dispatch to his theater, but that 2 or 3 months must elapse before the squadrons would be ready. Each unit would carry 12 officers and 270 enlisted men, and General Arnold believed that they would provide necessary mobility for the combat squadrons based on airbases distant from their parent organizations. COMHITPAIC applied for a minimum of 6 of the new service units. Pointing out that occupation of a forward base required a minimum of 1 heavy bombardment and 1 fighter squadron, he urged that these 6 units be sent out 2 at a time as rapidly as they could be activated and trained. South Pacific experience had demonstrated the necessity for availability of such units prior to arrival of the combat echelons.
By late December, 10 units of the type recommended by General Harmon had been activated and his own 6 tentatively were to be ready by 1 April 1943. Meanwhile the South Pacific commander was under heavy pressure to split up his 6th and 29th Air Service Groups so that their personnel could perform housekeeping functions at the various island bases. This Harmon was reluctant to do. In an effort to avoid it and to preserve his technical group, he sent an urgent request for 5 air base squadrons, to be assigned to Fiji, New Caledonia, Efate, Espiritu Santo, and Guadalcanal. In reply, the Chief of Staff indicated that General Harmon would have to await arrival of his 6 airdrome squadrons; the air base units were designed for domestic service only and could not be sent overseas. The new units, on the other hand, were essentially the same as the ground echelon of combat squadrons and their presence in the field would permit organization of advanced airdromes by leap-frogging over the existing bases. Each squadron was designed to support from 1 to 3 combat squadrons; shipment of the 6 was set tentatively for 1 April.

General Marshall explained that the service groups were designed to permit mobile repair units to move forward to combat squadrons as necessary. But he strongly recommended against breaking up the service groups merely to perform housekeeping or labor duty. They should be retained to operate intermediate supply, maintenance, and reclamation establishments.

Until these small units could be prepared and sent to the theater, General Harmon would have to utilize the personnel of the one depot and two service groups which arrived in the theater in
November. Of these, the 13th Air Depot and the 6th Service Group reached Noumea on 22 November, although they did not disembark until 2-4 days later. As these reinforcements for New Caledonia were going ashore at Noumea, the 29th Service Group was diverted from Fiji direct to Espiritu Santo, where it arrived on the 26th, although it did not disembark until 7, 8, and 9 December. Almost immediately the 29th Group established an engineer shop at Bunker Field No. 2 on Espiritu, but it waited until 26 December before the last of its equipment was put ashore. Within a few days a small advance echelon was sent up to Guadalcanal to lay the groundwork for movement of the entire group to that forward base. This echelon was followed by the 82d Service Squadron, the 1653d Ordnance Supply and Maintenance Company, and about two-thirds of the personnel and equipment of the 1832d Quartermaster Truck Company (Avn), all of which arrived at Guadalcanal on 1 March 1943.

Down at Noumea the 13th Air Depot Group, under Col. Harvey W. Froesser, immediately moved approximately 22 miles northwest to Tontouta Air Base, the group's supply squadron remaining behind for 12 days to assist in unloading operations. Of the 6th Service Group, only the Headquarters Squadron, the 38th Service Squadron, and the 1034th Signal Company accompanied the 13th Depot Group up to Tontouta. The remaining two units, the 71st Service Squadron and the 650th Ordnance Company, moved to Dumba, a base lying approximately 10 miles directly north of Noumea.
The service units now taking station on New Caledonia were destined to replace the inadequate supply system which had existed since February 1942. This primitive organization under Lieutenant Dyer had begun as a kind of overgrown technical supply section, attaining a strength of approximately 30 men by December. Handicapped by lack of personnel, equipment, and facilities, it had assembled and shipped spare parts for organizations as they moved on to new airfields; and later it furnished all supplies for aircraft operating out of Efate, Espiritu Santo, and Guadalcanal. Now it was to be replaced by a unit better equipped and designed for the task. As yet there was no air service command within the area. Because no formal air force organization existed, it had been necessary for General Harmon's nuclear SOS under Brig. Gen. Robert G. Breaux to assume all air supply responsibilities. For this purpose an Air Section was established in the supply organization, a unit which carried on until after activation of the Thirteenth Air Force in January, when gradually its functions were absorbed by the XIII Air Force Service Command.

The 13th Air Depot Group faced a major task. Its immediate assignment was to inventory its available stocks, for on hand were "extremely large numbers" of repairable aircraft supplies of all types including engines, accessories, tires, propellers, instruments, and hundreds of other items, many of which might have been placed in service had their presence been known. But until December personnel were not available either to repair these parts locally or to send them back to Hawaii for service. Consequently the
surplus accumulated, and the shortage of personnel served to increase the drain upon material allotted to the Pacific area.

Old equipment was piled in pyramidal tents or lay in the open, while new parts were accumulating. The 13th Depot Supply Squadron tackled this problem and by 18 December had prepared its initial file of some 8,000 items in stock, a file which grew to 60,000 items by 1 July 1943. For months the group personnel labored without relief, borrowing enlisted men from every available source, yet by 1 June, only some 20 per cent of the total stock on hand was under cover and in bins.

On 19 December, when the 13th Air Depot Group assumed responsibility for Air Corps Supply, it fell heir to all the problems which had plagued its small predecessor. Warehouses and binning facilities were not yet ready, but very rapidly a record was made of all available stocks, and by February the structures were completed except for shelving.

Of vital importance to the repair program was the 13th Depot's Engineering Department. When the depot personnel arrived on 26 November, construction of the shop building was well underway and was practically completed within 2 weeks. The section had expected a large engine overhaul program. Machinery was moved into the buildings as fast as it was received, and by 15 January the section was prepared for overhaul, except that parts for the program had failed to arrive. The visiting Air Service Command representatives discovered no records to indicate that overhaul parts for B-1820-55
or W-1710-65 engines had been shipped; and they reported that repair
of 60 of the radial engines were held up because of lack of these
parts, while the 30xw-1710-63 type would be due for overhaul within
the next 2 months.

Actually General Greene planned on an overhaul program of 125
engines per month. Using the available personnel on one shift, he
estimated the Depot could accomplish a rate of 50 per month, but if
an additional depot repair squadron could be sent out, facilities
of the Depot could be used on an around-the-clock basis. OPG agreed.
An additional depot repair squadron, less all but its necessary
housekeeping equipment, would be sent out late in January or early
February.

Meanwhile additional equipment was lacking in the South Pacific.
Three of the seven cleaning units had arrived, but no boiler had come.
Not a single engine stand for any engine was yet available, nor was
there any demagnetizing equipment. Machinery for grinding cylinders
was set up but by February lack of honing equipment still prevented
complete cylinder reconditioning. It was estimated that when fully
equipped, the engine repair department would have a monthly overhaul
capacity of 50 engines per month, but this goal could be achieved
only 3 months after all necessary equipment had been received.

Most disturbing was the knowledge that many of the missing items
even then were stored away in the hold of vessels lying in the harbor
at Noumea. Still more exasperating was the fact that the vessel
might already have been there for a month or more, but because Air
Corps parts lacked the necessary priority, they could not be moved ashore. To further complicate the problem, no lists of shortages on equipment could be submitted until the ships were unloaded and a careful check was made. Ships' manifests merely indicated so many boxes of machinery; they did not inform supply personnel as to particular items.  

As a consequence of a policy which placed lower priority upon spare equipment, aircraft were forced to operate unsupported by spare parts. Ships arriving in Noumea carrying aircraft as deck cargo quickly moved alongside the dock to discharge their planes, since these carried a high priority. But immediately after removal of the deck cargo, the vessel was pushed back out into the harbor without discharging its cargo of "machinery," there to remain for many weeks while the planes were placed in operation with no spare equipment.

The lack of unloading facilities created additional complications. For example, based on a requisition from the 13th Air Depot Group, the Hawaiian Air Depot sent by boat complete equipment for overhaul of R-1820-65 engines, even sending along a representative to assure safe arrival of the shipment. The ship was port loaded (items stored top to bottom in order of the ship's call), and after reaching New Caledonia it was held at Noumea for approximately 10 days awaiting its turn at the docks. But before it could be unloaded it was released and sent up to Espiritu Santo, where, in order to unload other cargo or because it was the nearest point to Noumea and the vessel was not returning to Noumea, all the overhaul parts were sent ashore.
A survey of the supply situation in February revealed that some confusion existed in obtaining proper code designators and shipping address information for the entire Pacific area. For example, "Giaico" New Caledonia was unknown locally and probably was intended for Plains de los Gaios. Tutuila Islands were listed as being in New Caledonia instead of Tutuila, Samoa. And in addition to major errors of this nature, depot personnel knew nothing of new code designators applicable to other stations within their control area.\textsuperscript{51}

Because of the extreme shortage of shipping facilities between Hawaii and New Caledonia, it was not felt that requisitions from the South Pacific should pass through Hawaii, despite the efforts of AAF Headquarters to effect this procedure. It was believed that even radio messages would be delayed at the Hawaiian Air Depot, and that on the whole, more rapid action could be obtained by requisitioning directly on mainland sources. Furthermore, General Breene was very anxious to employ the overhaul facilities available in New Zealand. Australian overhaul capacity by February was completely utilized and it was recommended that no engines be sent to the Fifth Air Force from the South Pacific. On the other hand, at Hamilton, near Auckland, there were facilities, equipment, and personnel necessary to accomplish overhaul of R-1820-66 and R-1820-97 engines. Therefore Breene urged that spare parts be shipped to New Zealand on lend lease. Actually only a very small number of engines ever were overhauled in New Zealand.\textsuperscript{53}
Gradually the difficulties of the early days were eliminated. Originally the squadron ordnance supply officers complained of lack of cooperation from the island commanders, but personal contact with General Breene brought a release of supplies. Then there was the matter of short stopping, and of actual theft of equipment from aircraft. Items simply disappeared en route to the combat area, and in some cases it was necessary to place guard on all aircraft to prevent loss. But with improvement in the general supply system, these depredations decreased. On New Caledonia, the 6th Service Group, which reached Tontouta on 25 November, was assigned to the I Island Command under Maj. Gen. Rush B. Lincoln, and all Air Corps supplies for local use passed through this group. General Harmon had diverted the 29th Service Group from the Fijis. In order to fill the gap left at Fiji, he planned to make up a special unit from parts of both the 29th and 6th Groups, drawing upon the specialists and distributing equipment as effectively as possible.

The initial project of the 13th Air Depot Engineering Section was unloading and assembling of eight P-5A aircraft, begun on 23 December and completed on 15 January. Next came a larger order. In February the entire engineering department was organized to modify B-25 aircraft; although delayed by lack of parts, it proved to be a major undertaking. By April the engine overhaul was well underway and finished engines were leaving the test blocks early in May. Such was the pattern of the early service organization in the South Pacific. In time detachments were sent to Efate, to Espiritu Santo, back to Fiji, and on up to Guadalcanal; by July, six AAF supply
stations were in operation and furnishing local issue for the several
island bases.

Meanwhile General Harmon labored steadily to furnish the air units within his theater with more adequate equipment. In January he recommended dispatch of an additional transport squadron. In view of distances involved and the local tactical situation, he informed AAF Headquarters that the supply facilities of the air echelons of each combat squadron should be raised from a 5-day to a 15-day level. Service groups should be equipped for 90-day operations, while the 13th Depot should maintain a supply level sufficient for 60 days at least 180 days.

There was need for factory representatives in the South Pacific to supplement the work of the service personnel. In February General Swinney reported continual engine maintenance difficulties with the V-1650 engines in his P-40F's; a Rolls-Royce Packard representative in the field could help to solve this difficulty. A survey of the entire theater in February indicated the presence of but two factory technicians, one from Bell and one from Allison, a situation which led to an appeal for broader representation in the field.

One problem long had disturbed the air commanders. Bombers and transports were flying long over-water missions without any radio sets for their rubber rafts. In November Harmon placed a request for 100 so-called dashing radio sets (SCR 578) complete with balloons and hites, pointing out that had such sets been available, they could have been used in at least eight rescue cases since August.
AFESC took immediate action to comply, promising to dispatch the 50 equipment by air. Yet nearly 3 months later only 36 sets had arrived and it was necessary to repeat the request. Attention had been focused upon need for the equipment by the disappearances and subsequent rescue at sea of General Twining with a crew of 14. General Twining's B-17 went down on 27 January while on a flight from Henderson Field to Espiritu Santo. Although the entire crew was picked up 6 days later from its rubber boat, the rescue had not been effected as a result of radio contact. The dinghies carried no equipment. In a request for 100 additional sets, General Hoxon cited the recent rescue. He was advised to search his warehouses; because air facilities were lacking, the remainder of the original shipment had been sent out by truck. In any case, 100 more sets were moving out at once.

Many other gaps yet remained in the theater's air equipment, some of them not so easily filled. For example, in September—early in the Guadalcanal campaign—Hoxon had requested five sets of type SCR-241 instrument landing systems, but by mid-January none had arrived. Repeating his appeal, COMMAND discovered that AAF Headquarters neither believed that he needed this type of equipment nor thought it desirable, because of lack of security to prevent employment by the enemy. This belief, he quickly explained, was "in error." Prevailing weather conditions with their low ceilings, together with night operations of bombardment aircraft, warranted the use of low-approach procedure, and the SCR-241 equipment would...
greatly facilitate operations. But the need was in advance of supplies. Complete equipment was not available, and delivery date of even a part of it (the localizers) was uncertain.

Despite all the minor shortages, the major hurdles had been overcome, at least as they concerned the air elements in the South Pacific. When General Harmon wrote that the theater was "getting pleasingly fat" on service units, he was referring to the AAF, not to the ground forces. The original task forces sent into Fiji, New Caledonia, Tongatabu, and Bora Bora contained a disproportionately low percentage of service elements to function effectively amid the primitive conditions of the Pacific island area. The result was a heavy drain upon combat troops for labor details, and COMENSOPAC was convinced that such calls materially decreased the effectiveness of army ground forces in subsequent campaigns. This situation originally had prevailed among many of the first air echelons to reach the theater, particularly in the squadrons of the 11th Group. But with the arrival late in November of the service depot and service groups, followed by the establishment of repair facilities, combat operations received more effective support.

In the South Pacific, acquisition of bases was one problem; furnishing planes for the bases was another. Heavy bombers with their great range offered no great obstacles; they possessed their own mobility, and to a lesser extent, so did the mediums. Both types could cover the long ocean stretches between the island bases, but the fighters could not. Or at any rate they had not yet been flown...
across the Pacific. As a consequence, much time was lost in moving these smaller planes out to their island stations or across the Pacific to Australia. It was necessary to disassemble, carefully crate, and ship the planes by surface transport, all of which was a laborious and time-consuming process. Even after arrival there was the necessity of reassembling the aircraft, often under the most primitive conditions.

In order to overcome this obstacle, Mr. Roosevelt directed, even prior to the invasion of Guadalcanal, that action be taken to construct a fighter assembly plant in the South Pacific, where aircraft brought down by surface transport from San Francisco could be assembled and flown on to their destinations. After some preliminary surveys by a naval representative and by General Breasee of Harmon's staff, a site at Bora Bora in the Society group was finally selected and agreed upon. Tovioiroa was first chosen because of its low flat character, possibility of easy construction, and deep water close in-shore. The entire project was regarded as urgent; its goal was assembly of 100 aircraft a month. It was estimated that facilities for an Air Corps detachment of approximately 300 men would be necessary, in addition to the airfield, dock and shop facilities.

General Harmon concurred in Breasee's selection of the site, which apparently was altered to Motu Mate, at Bora Bora; but the Chief of Staff and General Arnold were anxious to be certain that all factors of distance and weather would permit the ferrying of fighter aircraft to Australia. Harmon was reminded that long
distance ferrying of fighter types had been successfully demonstrated in the North Atlantic. CONSPANOPAC promptly replied that it could be done in the Pacific as well, and submitted a plan for the complete route, with a table of distances which indicated that the longest stretch was the 840 statute miles across the Coral Sea from New Caledonia to Australia. The entire plan strongly appealed to the South Pacific Commander. He did, however, foresee some disadvantages; for example, there would be engine wastage, an unknown percentage of planes would be lost in transit, highly competent pilots would be necessary, and there would be a requirement for diversion of heavy bombers as escorts. But on the credit side of the ledger there was the great increase in rapidity of delivery, the saving of cargo space, and the value of having a ready alternate route in the event of surface-raider or submarine attacks upon the cargo vessels.

Whether the assembly plant was established or not, he asked for an airdrome at Bora Bora. He pointed out that it would increase the defensive strength of the garrison on the island, and with an eye to possible future developments, he stated that B-29’s destined for the South Pacific could fly direct from the mainland to Bora Bora. For these reasons Harmon felt that there should be no delay in pushing the plan.

One handicap was the current shortage of engineer troops in the mainland. For this reason General Emons was sounded out as to his ability to undertake the necessary construction work, using facilities of the Hawaiian Department. Emons had the engineers;
he felt they could do the job if necessary, but he could not recommend it. They were at considerable distance from Bora Bora, there were no communications to the island, and they had not yet completed work at Tongareva and Aitutaki. In any case since all equipment, construction material, and skilled personnel must come out from the mainland, he believed that the project should be placed under an engineer agency in the continental area. The final solution lay with the Navy. By November Seabees forces were at Bora Bora and the Navy agreed that these personnel might be used to construct the air depot and landing field for the assembly of fighter aircraft.

Meanwhile General Arnold took necessary steps to prepare permanent personnel for the new project. On 14 September the Air Service Command was directed to organize and equip an aircraft assembly detachment consisting of a total of 12 officers and 252 men with instructions to prepare the unit for departure by October. Six days later the 1st Aircraft Assembly Squadron was activated, but General Arnold was notified that it could not be readied for overseas movement before the latter part of November. Amid all the preparations, the claim of priority again appeared. Shortly after the unit had been completed and while it was at San Francisco awaiting loading, its movement to the South Pacific was cancelled. The need for assembly of fighters in North Africa was great, superseding the claims of the Pacific. Accordingly the 1st Aircraft Assembly Squadron was diverted to North Africa, while the 2d Aircraft Assembly Squadron was activated for movement to Bora Bora.
although it could not be ready before 15 March 1943.\textsuperscript{75}

By March construction of the facilities at Bora Bora had been completed. Now, however, the strategical situation prevailing in the South Pacific had shifted drastically in favor of Allied forces. The Papuan Peninsula was in Allied hands, and so was Guadalcanal; accordingly the lines of communication to New Caledonia had become more secure. In view of the diminished danger to vessels carrying aircraft, and also as a result of additional experience in ferrying of fighter aircraft from Hawaii, AAF Headquarters doubted the wisdom or necessity of assembling single-engine fighters at Bora Bora.\textsuperscript{76}

From February to July, inclusive, approximately 175 fighter planes were scheduled to move to the South Pacific, or approximately 30 per month. Already (March) in New Caledonia, assembly of nearly a comparable number of fighters was being performed successfully, even though this achievement was possible only by diversion of personnel from other necessary duties. Therefore, Headquarters in Washington agreed with the Commanding General of the Services of Supply in the South Pacific that the 2d Aircraft Assembly Squadron should be sent to New Caledonia instead of to Bora Bora.\textsuperscript{77}

Out on Bora Bora materials continued to arrive, but the island's commander was in doubt as to the wisdom of completing the project. By 11 February, grading of the field was nearing completion, surfacing soon would begin, and the radio system was 75 per cent completed. On request from Bora Bora, General Stratemeyer advised General Ostrom to erect all the buildings and complete the depot according to the original plans.\textsuperscript{78}
Much planning and effort had been consumed in the preparation
for an assembly plant in the South Pacific; now it no longer was
necessary. Had the Jap not been thrown back in time to hold open
the northern line to New Caledonia, the assembly plant at Bora Bora
might well have fulfilled a vital function. Instead, the entire
development represented a successful effort in the South Pacific to
meet an emergency which never arose. Impetus for the original plan
seems to have come from Mr. Roosevelt; if he acted upon the advice
of others, the records do not indicate it. In any case the plan for
Bora Bora avoided the charge of "too little, too late." Fortunately,
it was almost a case of too much, too early.
Chapter V

THE GROUND AND AIR OFFENSIVE

Throughout the first 4 months of the Guadalcanal campaign it had been all but impossible to carry out anything like a sustained offensive against enemy positions in the Central and Northern Solomons. Not until late November was there any assurance that fuel and supplies could reach Henderson Field with regularity, or that heavy bombers would not be destroyed on the ground during one of the regular nightly shellings. However, with the defeat of the Jap in the series of naval, air, and ground actions in October and November, the enemy lost his freedom of action in the Lower Solomons. General Harmon now could concentrate upon increasing the intensity of long-range operations out of Guadalcanal.

Early in December Guadalcanal was reasonably secure. The beach-head covered some 17 miles from north to south, extending inland to a depth varying from 3 to 4 miles. Henderson Field, now a bomber strip, was in good condition; it was 6,000 feet in length, and was well protected by automatic weapons. Two fighter strips supported it. The one lying just to the east was a muddy affair in rainy weather, but the new strip across the Lunga River to the west of Henderson was a great improvement. Built mostly of coral, it was nearly ready for operations.
Despite these improvements, air operations on Guadalcanal still suffered the handicap of constant observation by the Japanese. The Japs were in strong positions around Mt. Austen, a terrain feature dominating Henderson Field from the upper Matanikau, from which they were able to report the movement of aircraft from all three airfields. While on a visit to the island in November, General Harmon had queried General Vandegrift as to when the Marine Commander proposed to take over the Mt. Austen area. Vandegrift appreciated the necessity for the move, but nothing was done until responsibility for defense of the Guadalcanal passed from the Marine Corps to the Army on 9 December. On this date, Gen. Alexander M. Patch, as XIV Corps Commander, assumed command of the Guadalcanal-Tulagi area.

The work of the First Marine Division on Guadalcanal was over. It left the island on 9 December, but not all Marines were withdrawn at that time. Left behind under Army control were the 2d and 8th Marine Regiments, together with an artillery battalion of the 11th Marines. But the bulk of the ground combat forces consisted primarily of the Americal Division, whose 164th and 162d Regiments were pushing along the coast until by 24 November they had succeeded in establishing a position immediately south of Pt. Crus. Beyond this point they did not go until a general offensive could be prepared, following the arrival of reinforcements. Throughout these operations, the P-39's continually hammered at Jap ground positions and troops all along the coast, on some days flying as many as 11 missions.
December was a month of preparation. On the way south from Hawaii were three convoys carrying the fresh 25th Division and the 6th Marine Regiment, although these units did not arrive until 17 December, 1 January, and 4 January. Meanwhile, the Jap was working overtime with his Express. After the disaster of mid-November the enemy seemed to have consigned his forces in the Lower Solomons to extinction. For approximately a week after the Battle of Guadalcanal, the searching B-17's reported a very low concentration of shipping at Ruin, but on 24 November, the number began to grow. Pilots sighted nine destroyers and seven cargo vessels, plus other craft they could not identify, while subsequent reports added possible heavy cruisers. The Jap obviously was preparing another run down the Slot to try to save Guadalcanal. On the last day of the month the attempt was made; in the Battle of Tassafaronga a U. S. Navy task force under Rear Adm. Carleton H. Wright drove off the Japanese, but only at considerable cost to its own heavy cruiser strength. Despite losses, the Express continued to operate with "considerable freedom of action." Although the small, fast task forces occasionally were intercepted by strike forces from Guadalcanal—usually SBD, TBF, and F-39's—the Jap continued to slip through to put troops ashore at Kokumbona, at Dome Cove, or in the vicinity of Cape Esperance.

Admiral Halsey was aware of the difficulties facing the forces on Guadalcanal; he also was aware of the losses his surface craft had suffered in the area around the Lower Solomons. In the latter
part of December he advised Harmon that he was not able to predict
the extent to which air and surface forces could check either the
Express or the enemy's submarines, and directed the Army general to
take necessary action for elimination of all Japanese forces from
the island. Accordingly, Harmon proceeded to Guadalcanal, where
he approved General Patch's plan of operations. Briefly, Patch pro-
posed to send the Americal Division, together with some units of
the Second Marine Division, westward along the north coast of the
island, while the 26th Division was to carry out an enveloping move-
ment to the south and westward of the Japanese forces. Before
the Jap could be driven off the island three steps were necessary.
First was the reduction of the hill mass known as Mt. Austen, which
dominated Henderson Field from its position east of the Matanikau
and 5 miles south of the beach. Secondly, the Jap would have to
be driven west of Kokumbona, thereby preventing him from employing
artillery against the air strips. And finally, it would be necessary
to block the trail which crossed the island from Kokumbona south to
Beaufort Bay, thereby preventing any movement to our south flank or
the escape of enemy troops who were advanced east of the Pohu River.

On 17 December preliminary operations against Mt. Austen were
opened by the 182d Infantry in the face of stiff resistance. To
circumvent the enemy the 2d Battalion of the 182d made a wide flan-
k ing movement to the south, only to be halted by very heavy enemy
resistance on a line running approximately north and south between
Hills 27 and 31. Opposing it was the famed "OKI" unit, entrenched

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across the fork of the Kotelikou, and dug in on the rugged terrain,
comprising the northwest slopes of Mt. Austen. On the 6th, the
132d was replaced by the 35th Infantry, and 4 days later the final
offensive on Guadalcanal opened at 0550. Elements of the Army's
American and 26th Divisions, and of the Second Marine Division, faced
the task of driving the Japs off the series of hills collectively
known as Mt. Austen. Much of the terrain was nearly impassable.
As often as possible the Japs had organized ground in such a way that
it was necessary to deliver the attacks upward. Resistance was bitter;
often the strong points were taken only after violent hand-to-hand
combat.

Throughout the early stages of the offensive, the AAF partici-
pated directly in the battle. Now on the island were detachments
from the 33rd, 70th, 12th, and 95th Fighter Squadrons, all operating
under the control of Brig. Gen. Francis F. Mulcahy, who had arrived
with the forward echelon of the 2d Marine Aircraft Wing on 23
December. The burden of much of the ground support was borne by
the F-29's, which had proved themselves so well in their close
cooperation with the Marines. Now they were to carry on with the
Army's divisions. The remaining detachments of the 85th had
reached the island on 3 December where they immediately began opera-
tions from Fighter Field, enjoying the distinction of being the
first complete AAF squadron to be on Guadalcanal.

During the preliminary stages of the offensive, F-29's and
SED's struck regularly at the enemy's bivouac areas and supply

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dumps around Kokumbona; the Marines merely logged their work as "P-39's harassed the enemy all day." On D-day they did more. From 0550 to 0620, artillery pounded the enemy, followed by 20 minutes of bombardment by 12 P-39's and 12 SB-2's. The targets were the enemy's positions on Hill 52 and on points lying south of the hill. Each P-39 carried one 500-pounder, each SB-2, three depth charges, so that when the ground troops launched their attack at 0635 they reported little resistance in the bombed area. Although it was expected that the Jap would attempt to hold Hills 52 and 53 at all costs, the 1st Battalion of the 27th Infantry was able to gain its objective (apparently Hill 53) without serious opposition, a maneuver which forced the enemy into a pocket bounded by Hills 56, 57, and 66. In addition to clearing the way for reduction of the strong point, other P-39's struck at reinforcements moving up through the jungle and had set afire several munition dumps. In the struggle around Mt. Austen, the AAF's fighters attempted to isolate the area to the Jap by cutting him off from the coastal supply points. Down on the beach at Kokumbona two P-39's strafed troops early on the 13th. Five more hit at Visale later in the day, and as often as targets appeared the strafers were out to strike. Next day they flew all day long, this time using improvised gasoline bombs; and on the 16th, B-26's were called in to assist. Tassafaronga was the target of the medium bombers, where they dropped 82 x 100-lb. bombs followed by a depth charge attack by five P-39's in the Mt. Austen area.
It was difficult to supply the troops around Mt. Austen, particularly in the sector held by the 35th Infantry of the 25th Division. Both the 1st and 2d Battalions met powerful resistance around Hills 43 and 44, where supply lines grew so difficult that it became necessary to call upon the B-17’s from Henderson Field for unorthodox assistance. Until the 65th Engineers could complete their task of dredging the Katunikau it was necessary to enlist the efforts of 300 natives plus many of the 25th’s combat personnel to carry in fuel and ammunition. However, by 11 January it was clear that the 1st and 3d Battalions had out-distanced the native carriers, who could not make a round trip in 1 day. Until the native camp could be moved forward, a procedure which required 3 days, the burden of providing rations, water, and ammunition was thrown upon 24 B-17’s. Improvised cargo parachutes were used to the extent of the local supply but it was necessary to make some drops without parachutes; items were simply wrapped in canvas or burlap and thrown out of the planes. As a result, the rate of loss was excessive. Probably 85 per cent of the rations were saved, only 15 per cent of the ammunition was usable, and practically none of the water, which was dropped in 5-gallon cans, could be recovered.

The scale of these operations was modest when measured by the standards of other theaters. On the 13th, four flights by a B-17 delivered 7,000 pounds of ammunition and supplies; 2 days later another plane dropped 8,000 pounds. Yet small as they were, these efforts helped to keep alive a battalion until the ground supply
line could be reopened. Meanwhile, the 65th Engineers had completed their dredging by 17 January, a feat which enabled a barge line extending up the Matanikau to the base of Hill 50 to begin its operations. From this point a steep trail led up to the front lines and hand carriers relieved the B-17's from supply operations.

While the 1st and 3d Battalions were handicapped by lack of supplies, the 2d Battalion of the 35th Infantry was unable to advance against the strong Japanese resistance of the 681 unit, which now was blocked in the pocket between Hills 51-27 and 45-44. The area was small and too constricted to bring artillery fire to bear without risking casualties among the attacking troops. Here was a problem for the P-39's. On the morning of the 17th a squadron carried 12 x 500-lb. depth charges into the pocket, where their terrific blast was heightened by the nature of the terrain. Two days later the pocket was overrun and the 25th Division drove on toward the coast. Its goal was Kokumbona, which it reached on 23 January, capturing the Foba River valley as well.

Thus the Jap lost control of the nearest good landing beach west of the air strips. At the same time he lost his artillery positions with the pieces which were a constant menace to Henderson Field and to the ground troops in the Mt. Austen area. Lost, too, were his supply routes to the south and east which led to the Matanikau, then on around to Henderson Field; gone were the principal radio station, the main ammunition dumps, and the stores of materiel.
The final phase of the offensive consisted of a pursuit of the enemy along the northwest coast of the island toward Cape Esperance, a procedure which General Patch ordered on 25 January. Along the narrow coastal plane, no more than 300 to 600 yards wide, the Army's 161st and 147th Infantry Regiments and the 6th Marine Regiment drove against a defense which at times was most stubborn. The terrain was cut with many shallow streams, while inland, the high ground extended toward the beach in a series of long finger-like ridges to which the Jap clung on the reverse slopes. At the Bonegi River the advance slowed in the face of organized resistance, but the 147th Infantry rapidly overcame this, continuing on up the coast against scattered opposition. Now the ground forces enjoyed the support of friendly destroyers as they pursued the Jap.

When the 2d Battalion of the Americal's 132d was dispatched in a separate amphibious operation, it was placed completely in the rear of the enemy. On 1 February this force landed at Verahui, about 7 miles southwest of Cape Esperance. Thus it not only blocked any retreat of the enemy concentrated in the Cape Esperance area, but was ready to drive north and east toward the forces advancing to the west. Both forces made excellent progress. In his report for 8 February, General Harmon could inform the Chief of Staff that "We have the Nips on the run." The Jap was on the run. He was learning the meaning of the phrase "isolation of the battlefield" as he retreated up the coast past the skeletons of the vessels intended to bring in his reinforcements. As COMSOPAC had indicated to General Harmon, it had
not been possible to seal off Guadalcanal entirely from the enemy's supply depots up the Solomon chain. But what was achieved in this direction was in large part the product of the growing air strength upon the island. As soon as the supply lines into Guadalcanal had been secured in November, it became possible not only to defend the field more adequately, but to mount an increasing number of B-17 strikes against the shipping points on Bougainville. No longer was long-range air activity limited to sporadic and weak raids against enemy points; now his distant air bases and cargo carriers felt the presence of the heavy bombers, of medium B-25's, and of a growing number of strikes by SB2C's and TBF's.

The Jap did not supinely accept all this without a counter effort; he too was racing against time to solidify his holdings throughout the Solomons, and he had selected New Georgia as a block to Guadalcanal. Coast watchers reported that on 20 November, under cover of bad weather, five ships had successfully reached Munda, where they unloaded and departed before planes from Henderson could reach them. Four days later four B-17's hit Munda Point area; henceforth Munda became a primary target for every type of combat aircraft on Guadalcanal. Almost simultaneously the Jap improved his position at Rokata on Santa Isabel, where in late November he landed fresh reinforcements at what he called a "sea reconnaissance base." Rokata, like Munda, became a frequent target in December and January.

As the heavy and medium bombers labored to pin down the Jap farther north it became increasingly difficult for the enemy to keep
alive his units on Guadalcanal. Early in December P-39's searching out of Guadalcanal sighted several groups of 100 to 200 oil drums lashed together to support wooden boxes, all slowly drifting ashore off Tassafaronga. Perhaps they had come from submarines or from barges. In any case, if the Jap hoped to feed his troops by such methods he was disappointed; on 4 and 5 December the P-39's thoroughly bombed and strafed these supplies before most of them ever could drift within reach of the enemy. 38 Further north the Jap was making a determined effort to salvage what he could in the Solomons, and the two B-17's which daily covered the sectors leading up both sides of Bougainville maintained a sharp watch on the Buin-Tonoalei area, as well as on the fields at Buka and Kteita.

Perhaps the best example of Japanese persistence was the completion of the runway at Munda Point on New Georgia, despite almost daily bombing by all types of aircraft from Guadalcanal. 39 Early in December there were indications that an air strip was underway on Munda. When P-39's thoroughly strafed the area at 50 feet altitude on 6 December, they found trucks, steam rollers, carts, and ample evidence of two strips under construction. At the same time close investigation of Fanioka Island in the Russells revealed increased activity, so that this point too came under attack by P-39's from Guadalcanal. 40

B-17's of the 5th and 11th Groups now operated after 3 December under a joint headquarters, and apart from their search mission, their primary target for the month was Munda. No less than 21 missions were made against the Jap air installations on New Georgia
alone, although as often as possible counter-air operations were carried out against the Bougainville air strips. Despite the pounding of Munda, the field appeared nearly ready for use by 9 December. Whenever the reports of search planes revealed a concentration of shipping in the Buin area, a strike mission would follow up with an attack, if sufficient planes were available. And in retaliation for the incessant night work of "Washing Machine Charlie" on Guadalcanal, the B-17's began to operate over Kahili and Munda during the early morning hours in an attempt to harass the flying personnel.

On one such mission, that of 19 December, two baskets of a special "secret weapon" were loaded into "Skipper," the plane of Capt. J. J. Charters of the 98th Squadron. For 2 hours shortly after midnight Captain Charters remained over Kahili, while enemy searchlights probed the sky to find him. At 15-minute intervals bombs were dropped, and after them went the secret weapons. These strange devices were smooth, hollow cylinders, of semi-transparent material, tapered at one end, which yielded an eerie wail as they dropped. Their effect upon Japanese personnel could not be measured, but the words of the squadron historian were probably apt: "it is possible to have almost as much fun with empty beer bottles as you can in the process of emptying them." Some of the raids upon Buin yielded quite unexpected results. For example, on 11 December reports filtered back from the local coast watcher that a direct hit had been made upon a wire cage containing seven large dogs, for which the watcher conveyed proper appreciation to those responsible.
Rabaul was the focal point of nearly all enemy shipping destined for the South Pacific. Here was a wealth of targets if only they could be reached, but the round trip from Henderson was over 1,300 miles, a distance too great to permit the B-17 to carry a full load of bombs with a reasonable fuel reserve for the return trip. Nevertheless, at 2300 on Christmas Eve 11 heavy bombers staging through Guadalcanal from Espiritu left Henderson Field for Rabaul. Six reached the target. Two planes secured three direct hits on a large transport or cargo vessel, and near misses on others of the 16 vessels sighted in the inner harbor. The others struck at wharves, air strips, and shipping, but reported less success. All planes returned from the mission to report the presence of more than 60 ships in the outer harbor alone—a rich area for strikes if it could be reached regularly, and in strength. It could not as yet, at any rate not from the Solomons. As a result, on 26 December General Harmon ordered 12 heavy bombers of the 36th Squadron over to Moresby, where they were to remain temporarily in a more favorable position to strike at Rabaul.

By the end of December the Jap was strongly entrenched in the Central Solomons. To the north, Buka showed increased activity; in the Buin area of Bougainville the 2,200-foot landing strip on Ballale Island appeared surfaced, while the air strip at Kahili was enlarged and strengthened, probably to accommodate two-engine bombers. Heavy antiaircraft fire was increasing in intensity over the Buin area, but it was Munda which furnished the chief concern. The strip
was strategically important to the Jap. Its coral construction lent itself to rapid repair, and lying 195 miles from Henderson, it was close to the extreme range of SBD's operating from Guadalcanal. If it could be developed, fighters could cover the movement of surface craft down to the Lower Solomons and hold off the devastating air attacks upon the Tokyo Express. To hold Munda the Jap sacrificed heavily. Any combat type of plane could hit it from the Lunga strips, and hit it they did, both by day and by night. P-17's sometimes remained over Munda for 3 or 4 hours on a night mission, dropping one or two 100-lb. bombs every 15 minutes to harass the Jap defenders. Early on the morning of the 24th, 9 P-39's and 4 F4F's escorted 9 SBD's up to Munda, where they caught some two dozen Zeros attempting to take off. The total bag ran to 24 enemy fighters destroyed on the ground or in the air, of which the P-39's were credited with four. Every one of the attacking force had returned undamaged; but this was an exceptional achievement, as it was rare that such a concentration of aircraft could be caught on the ground.

The Jap did what he could to retaliate. On Guadalcanal his patrols still occasionally threatened to infiltrate through the defense lines in attempts to put out of action the planes on Henderson and the fighter strips. On 12 December a small party broke through to destroy one P-39 and a gas truck on Fighter No. 2; two other P-39's were wired for demolition but the charges failed to explode.

Normally these raiding parties were apprehended before they could reach any of the grounded aircraft. More serious by far was
the constant annoyance of Washing Machine Charlie. For months small raids by enemy planes at night had been the cause of much irritation to troops and air personnel on Guadalcanal. Pilots rapidly felt the effects of loss of sleep and excessive fatigue; although Jap bombing was never very accurate, and some of the missiles were bottles, nevertheless the mental hazard was constant. Furthermore, the increase in exposure to malaria during the darkness in the foxholes was a constant threat to combat efficiency of all personnel. General Patch was anxious to initiate preventive measures, recommending to Admiral Halsey on 21 December that six night fighters be assigned to the area. General Harmon in turn passed on the request to Washington, asking for one flight of night fighters with Ground Control Intercept (GCI) equipment.

As usual at this stage of the Pacific war, the major problem was one of equipment. GCI installations in the Pacific theater were practically non-existent. The Director of Air Defense suggested that one SCR-588 be sent out to Guadalcanal, but the Navy demurred at employment of this equipment, stating that mobile rather than fixed installations was required. The Navy had indicated that within 90 days it could make available GCI equipment by drawing upon a mobile British type in New Zealand; should this installation occur, it was recommended by the Director of Air Defense that six night-fighter aircraft be sent down to Guadalcanal from Hawaii.

On 18 February seven P-70's of the 6th Night-Fighter Squadron's Detachment "B," 18th Fighter Group departed from Hawaii bound for
Guadalcanal, where they arrived on the last day of the month. One plane was lost over the ferry route; the remaining six took their station to prevent the Jap from continuing his night harassment of the air installations on Guadalcanal. For the interim General Saville had recommended that the night defense of Guadalcanal be conducted by searchlights, antiaircraft, and fighter-searchlight teams, pending the arrival of proper equipment and personnel. So far as possible, this was done. An F4F went up one night in an effort to prevent the bombing, but friendly antiaircraft fire forced the Marine pilot down. Again a P-38 tried it, but the Jap merely waited until the plane had returned, then struck at the field.

The Jap did not always get away. Repeatedly pilots of the 339th Fighter Squadron had been asking the air commander for permission to attempt a night interception. Finally the offer was accepted. On 29 January Captain John W. Mitchell was airborne before dawn, catching a twin-engine bomber just after it had dropped its bombs. With an appreciative ground audience watching the performance, Captain Mitchell's P-38 sent the Jap flaming into the sea. Unfortunately this result was not the rule, and no real answer to the night raiders was yet available. Meanwhile, the nightly contest continued over Kunda and Guadalcanal. Neither area was granted any respite. If the Jap was wearing down the strength of the men around Henderson Field, there at least was the satisfaction that the enemy bedded down around Kunda Point was on the receiving end of similar disturbance. The "Black Cats," Navy PBY's, now were harassing the
Japs by dropping demolition bombs, mortar shells, beer bottles, fragmentation clusters, all at irregular intervals during the night as often as weather permitted. 60

When General Harmon went up to Guadalcanal at the end of December, he found conditions "much improved," so far as air activities were concerned. The fighter pilots impressed him, and the P-38's were giving excellent service with a minimum of maintenance difficulties. P-40's, on the other hand (nine were in the island early in January), were suffering from engine trouble. Henderson (Bomber No. 1) he judged to be in "fair condition." Fighter No. 1 was being regraded in preparation for laying of Marston mat, while the mat almost completely covered Fighter No. 2. Down at Koli Point, Bomber No. 2 was under construction. 61 Of all the planes, he singled out the P-38 for special praise. It was providing cover for bombers, was performing "excellently" as a reconnaissance plane, and had "splendid potentialities" as a second bomber. With the arrival of replacements and the increase in allotment, the total in the theater would be 41, but COMUSPACFEL felt that he could readily use 100 and recommended this figure as a goal to be achieved during the spring. 62

The improvement was heartening, yet operations from Guadalcanal still fell far below the ideal. Weather conditions were extremely severe, imposing a heavy strain upon flying personnel. Strikes were being made under low ceilings, with limited visibility and amid driving rainstorms; pilots executed take-offs and landings during the hours of darkness whenever need arose. Some fighter pilots on
escort duty were averaging 5 to 6 hours flight each day, which was a heavy burden even under favorable conditions. When Charlie prevented sleep and rest each night, the rate of physical exhaustion was high.

There were other obstacles to smooth operations. At year's end the enemy was placing heavy concentrations of fighters at Rabaul, Buka, Buin, and so far as possible, at Munda Point. B-17's on search were meeting heavy opposition, a fact which led General Harmon to request Admiral Fitch (COMAIRSOFAC) to review his plan in regard to B-17 reconnaissance over Bougainville. There was evidence that the Jap was, at several points in the Solomons, maintaining an air alert which increased the hazard to unescorted B-17's, either alone or in formation. At the same time the senior air commander on Guadalcanal (General Mulcahy) appealed to COMAIRSOFAC to move one squadron of B-17's up to Guadalcanal from Espiritu because of the limitations of aircraft then available on the island. General Mulcahy claimed that the B-25's were limited by an operating radius of 236 nautical miles, a ceiling of 10,000 feet, and an inability to operate at night. As a matter of fact, until the last day of the month the medium bombers took no part in December operations from Guadalcanal. On the 16th, Harmon reported that he had seven B-25's in the theater, with five more on the way, and that facilities at Henderson were not yet adequate to permit employment of his B-25's.

When finally they moved up permanently at the end of December, provision of escort for them proved a major problem. Only the
P-38 could provide escort to the full limit of the B-25 range, and this fighter was at a "terrific disadvantage" when forced into combat at the B-25 ceiling or lower. In strikes against Kahili and the Bua area, P-38's could furnish high cover at the target; while P-40's, held 50 miles short of Bua, could cover withdrawal of the bombers. On the other hand no fighter then available could escort the B-17's to Rabaul. This development could occur only as the result of seizure of more advanced bases. It was nearly always possible to send along fighter escorts to Munda, although early in January it became necessary temporarily to withdraw the P-39's from their local attack operations on Guadalcanal in order to hold them in reserve for escort missions.

The pattern of operations for January and February remained fairly steady, with Munda receiving constant attention. For his part the Jap continued to develop air bases up and down the Solomons. By mid-January there were reports that the enemy was clearing a new landing strip at the southeast tip of Kolombangara, and by the 22d, existence of this field at Vila Plantation was confirmed. Harassment of the Lunga fields continued. The Jap struck on 11 January, twice on the night of the 14th, once the next night, while on 21/22 January no less than seven raids were made. Even distant Espiritu Santo received its share of bombs; the island was bombed on the night of 20/21 January, for the first time.

General Harmon's visit to Guadalcanal, made amid the operations of December and January, indicated that substantial progress had
been made in improving base installations, more perhaps than in securing a flow of reinforcements to the theater. Early in December there was no indication that either replacement or filler combat crews were en route, which led Harmon to report that action must be taken if operations were to be sustained.\textsuperscript{71} The AAF commander pled strongest for replacement crews for his bombardment aircraft; and he was not particular as to the basis for shipment—almost any help would be appreciated. He observed the squadrons of the 11th and 5th Groups, found them tired, almost too tired to carry on, but he could "give them no reasonable assurance as to how long they will have to carry the ball. To them there appears no end—just on and on till the Jap gets them."\textsuperscript{72} The best that could be done was to send the crews on an occasional rest trip to Auckland, but the lack of transports did not permit this on a regular basis.

Much had been asked of these pioneer air crews. Some of them back in September had flown as many as 17 consecutive days on missions which averaged 11 to 13 hours daily; many of them had gone to bed hungry at night after flying combat missions all day. Flight surgeons recognized that they were overworked, but were forced to close their eyes to the physical condition of pilots and crewmen. The Air Surgeon of the Thirteenth Air Force estimated that out of the entire 11th Group, less than 10 flying officers could pass the standard AAF "64" physical examination.\textsuperscript{73} By the end of December approximately 60 bomber crews were available for the two heavy groups in the theater, of which 25 lacked navigators; while 10 were without bombardiers.\textsuperscript{74}
AAF Headquarters were aware of the strain on the personnel in the South Pacific. Apparent as a direct result of information from Harmon and Scudder, General Arnold initiated a program of replacement for all combat personnel after approximately 4 months' continuous service, supported by the provision of rest opportunities. Meanwhile, Harmon had been informed that the 11th Group would be replaced at the rate of eight crews per month, yet it was questionable whether this flow could save his crews. By 8 January only 19 remained of the original 35; the Flight Surgeon stated that more than one-third of the enlisted men and over half the flying officers in the entire group required immediate relief "if they are to be salvaged for further useful service."

The answer lay in immediate replacement of the entire unit. This was Harmon's wish, but for the moment, replacement rested upon the plan to relieve no more than eight crews per month. On 9 February, Admiral Nimitz informed General Harmon of the final plans for relief of the 11th Group. The 307th Bombardment Group (B) would move south with its B-24's. The 5th Group would remain with Harmon, while the 11th would be returned to Hawaii for reconstitution as a B-24 group. Exchange was to occur in a manner to insure reasonably effective bombardment operations in both the Central and South Pacific during the period of movement.

In late October the 307th Group had arrived in Oahu as a replacement for the 90th, which had gone on down to Australia; 2 months later it too was directed to leave Hawaii for the South Pacific, but
only over the strong protest of General Emsen, who stated that the
movement "completely denudes us of bombardment squadrons except for
remnants of a former light bombardment squadron..." The risk
to Hawaii was accepted; need for the fresh group in the South Pacific
was even more critical, and on 4 February Hamaiz ordered 16 B-24's
to proceed south at once. The remaining planes and crews were to
move out as soon as effective replacements were received from the
mainland. Within 2 days the first 6 B-24's of the 307th Group were
off for Espiritu From Canton, followed by 6 from Cahu on the 7th,
2 on the 8th, and the final one on 9 February. On this last day the
ground echelons of the 370th and 424th Squadrons as well as the
307th Group headquarters were ordered to Gualdan, although these
units did not leave Cahu until the 22d, when they sailed on the
President Tyler. 31

The 11th Group was nearing the end of its activity in the
Hebrides and Solomons. It carried on through February; then early
in March its aircraft were transferred to the 5th Group. Finally,
on 26 March all remaining personnel embarked on the President Polk,
reaching Cahu on 8 April, after an absence of 9 months. 82 From this
point on, its record becomes part of the history of the Seventh Air
Force. The group did not return empty-handed. In recognition of its
long service against the Japanese the entire unit was granted a
Presidential Citation on 23 January 1943. 83

A solution for the problem of the worn 11th Group was alone not
enough; General Harnon badly needed help in other categories as well.
Not only were his planes and personnel bearing a heavy burden, but the flow of aircraft to his theater had fallen well below the total allotted to the South Pacific by the Joint Chiefs of Staff. The agreement with the Navy had committed to the South Pacific a total of 72 heavy bombers, 57 mediums, and 150 fighters, all of which were to reach the theater by 1 January 1945. By the end of the year actual replacements were far behind this schedule in medium and heavy bombers, although fighters had more than met the minimum designated by the original agreement. Only 42.4 per cent of the allotted mediums were in the theater. OPD called General Arnold’s attention to the fact that this situation clearly exposed the War Department to criticism by the Navy. At the same time the field commander added his own plea for replacements. As of 2 January he reported 41 B-17’s in the South Pacific, of which only 25 were in commission, and 12 of these had been sent off to Port Moresby for operations against Rabaul under General Kenney. Moreover, many of his heavy bombers were so old and war-worn that they could not be expected to carry on much longer.

Admiral Halsey was equally interested in increasing the tempo of air operations from Guadalcanal. Early in December he informed Admiral Nimitz of his plan to carry through the construction of two bomber and two fighter strips on CAG-US. As a complement of aircraft for these strips he indicated a total of 206 aircraft, consisting of 60 fighters, 40 dive and 18 torpedo bombers, 30 heavy bombers, 20 mediums, 12 Husdens, and 6 photo and utility types.
General Arnold could readily agree with the plan to expand the operating facilities; he could not concur in the proposed disposition of aircraft. Placing 30 heavy bombers on Guadalcanal would "split up our Tactical units" and the same result would occur if 20 mediums were to be sent to the island. He made it plain that all aircraft for the new strips must come from the rear areas, since it was impossible at the time to increase air strength in the Solomons. Furthermore, he doubted the necessity for such an increase and even suggested that a strategic study might call for a decrease. 90

In response to this suggestion, AO/AS, Plans surveyed the respective order of battle in the South and Southwest Pacific, concluding that AAF strength committed to the area or on hand was sufficient for the immediate future.91 The figures were reassuring. A comparison based upon General MacArthur's estimate of hostile air strength as of Christmas Day 1942 showed a total of 405 Japanese aircraft operating within the two South Pacific theaters. Opposing these were 989 Allied planes, a number which furnished a substantial preponderance.92 Theoretically this margin of superiority was increased even further by Plans' estimate that 338 enemy aircraft had been destroyed, as against a loss of 160 Allied planes.93 Plans reiterated General Arnold's original contention that replacements for the forward areas be furnished from the rear areas rather than by assignment of additional aircraft above existing commitments. The division restated, as well, the objections to splitting up squadrons in order to meet the arbitrary figures of the Navy, and
proposed that one heavy group of 36 aircraft be assigned to the South Pacific. But as for reducing the current commitments, the recommendation was against it. Enemy activity in the South Pacific made such action undesirable—full implementation of the original JCS decision would suffice. This analysis received the approval of the Air Staff on 11 January 1943.

Proof by AAF Headquarters that a preponderance of air power lay in the hands of the Allies in the South Pacific did little to relieve the strain upon General Harmon's men and equipment. He needed planes. He soon was to get them. Early in January General Arnold agreed to place two additional medium squadrons in the South Pacific to augment the 69th and 70th squadrons already operating in the theater. Since OPD was unwilling to move any squadrons away from General Kenney to meet this requirement, let two squadrons, plus a medium group headquarters be transferred to General Harmon from the Western Defense Command. The new squadrons were the 390th and 75th, which together with the 42d Bombardment Group (M) were withdrawn from the Western Defense Command. By 20 February they were scheduled to move out from San Francisco on the first available transportation, to be joined on 22 March by the 69th and 70th Squadrons, which were relieved from the 38th Group (M) on 26 February for reassignment to the new 42d. Nine combat crews of the 75th Squadron left Hamilton Field for Hawaii on 5 March 1943 in nine new B-25's. The 42d Bombardment Group (M), which included the 390th Squadron, sailed from San Francisco aboard the Maui on 28 March, arriving at Honea on 15 April.
These aircraft were B-25's, as were all medium bombers slated for Pacific service, just as B-24's were replacing all B-17's. General Arnold had been considering the advantages of such a change for many weeks. Already in October he had advised General Kenney of the shift in type of heavy bomber, but apparently General Hormon was not yet aware that a complete exchange was underway. It was planned that the number of B-26's and B-17's would be reduced as a result of attrition until the number fell below a point of efficient operation, at which time the remainder would be replaced by B-25's and B-24's. Meanwhile all normal replacements would be the latter types, B-25O's and D's, and B-24D's.

All along the line there was improvement. On 3 January General Hormon was informed that 9 heavy bombers with crews were expected to depart within 1 week, 9 more would go out later in the month, and 14 would reach the South Pacific in February. The 26 additional navigators and 16 bombardiers which he asked for on the 19th would be furnished "without delay." Late in the month all but 6 of the navigators were under orders to proceed by air from the mainland, to be followed by 8 additional navigators with 9 more bombardiers who would come out by air from Hawaii and be available 20 February. Throughout the campaign the pressure upon navigators had been heavier than upon any other crew member; even at Midway this factor was evident. Flight surgeons attributed it to the constant over-water flying, where the navigator, who bore the major responsibility, was placed under undue mental strain for long hours.
in daily flights. Whatever the cause, they had collapsed more rapidly than anyone else, with the result that the crews were short in this department. Now at long last, replacements and fillers were on the way. 102

Not all of the scheduled aircraft reached Harmon as planned: only 8 B-24's arrived with crews in January and 4 of the B-35's had B-25 crews, 103 but even this situation was a vast improvement over the slim diet of 1942. There was a reason for the change. AAF Headquarters had given the highest priority to the assignment of aircraft to the South Pacific in an effort to bring the theater up to the full strength authorized by the Combined Chiefs of Staff. "Strenuous efforts" were being made to avoid delays along the ferry route and "every effort" was under way to meet personnel requirements. 104

One plane could not be spared out and it was badly needed. The P-38 was the work horse of escort operations. There were heavy demands for it from the forward area, where in the 60-day period ending 15 February no less than 51 per cent of the total number at Guadalcanal had been lost either operationally or in combat. General Harmon asked for more. 105 Seven were on the way by surface transport, having left on 6 January. Beginning with March production, 5 P-38's would be allocated each month to the South Pacific, thus allowing a 20 per cent attritional replacement for the full squadron (the 339th) of 25 aircraft. 106

Now came an effort to profit by Kenney's experience with the
B-25. General Harmon requested that 25 per cent of the medium bombers
dispatched to his theater be modified to carry eight machine guns and
fragmentation bomb racks, in accordance with General Kenney's recom-
mendations. Acknowledging the request immediately, AFRDB advised
Harmon that action had been initiated to provide the necessary per-
centage of medium bombers equipped for minimum-altitude bombardment. In the field, as well, the mediums were equipped for low-level attacks.
Both at Eagle Farms, Australia and at Tontouta the B-25's were given
eight forward-fixed .50-cal. machine guns. Ahead lay the
prospect of replacing many of these mediums with the cannon-carrying
B-25. Would General Harmon like to use them in the South Pacific?
He would. At the rate of 20 per month, if they could be made avail-
able, but this development lay in the future.

The replacements now beginning to move out to the South Pacific
were regarded by COMGENUSPAC as no more than the barest minimum.
His air crews were tired and in some units which had been in the area
for nearly a year, morale reached a low point. In the 69th Squadron
(M) there were only 6 navigators for 13 aircraft during the last 2
weeks of January; these were forced to act as bombardiers, and
occasionally they even rode the planes as co-pilots. Not only
were sickness and strain cutting deeply into the clan of personnel,
but in some cases there was a surprising lack of imagination in the
provision of living quarters for air personnel in the forward area.
At Guadalcanal, for example, when the 69th returned from its first
raid on Kunda on 31 December, having flown up from Espiritu earlier
in the day, it was assigned a camp site which formerly had been a
garbage dump and a Japanese burial ground. "With the stench of
garbage and decomposed bodies strong in their noses, the men and
officers of the 69th spent their first night on Guadalcanal." 111
Then there were the rumors of return to the States which the ex-
perienced squadrons were quick to credit as official. When addi-
tional tours were announced, morale sank; personnel of the 69th
Bombardment Squadron (N) and the 67th Fighter Squadron, both veteran
units, had undergone such an experience. 112
For much of this there were reasons. AAF Headquarters was aware
of the deficiencies. Its accepted policy contemplated automatic
monthly replacement of aircraft and crews on a basis of 20 per cent
of unit equipment in planes, three-fourths of which would be flown
out by permanent replacement crews. 114 Yet several factors made it
impossible to implement this program. There was the delay in modi-
fication and final preparation of aircraft, coupled with the heavy
demands upon Air Transport Command personnel. When it was anticipated
that the aircraft would be flown out by their own crews within a
reasonable period, AAF Headquarters was reluctant to increase the
burden of ATC air crews. 115 Furthermore, newly activated groups in
the Middle East and India absorbed many trained crews originally
intended as loss replacements, while the entire program of Replace-
ment Training Units was late in starting, although it was believed
that by early spring the supply would meet the demand. 116 These
were the immediate factors which had prevented rapid shipment of
air strength to the South Pacific. Now it was possible to say that a solution was in sight for most of them.
On the afternoon of 9 February organized enemy resistance came to an end on Guadalcanal, when two enveloping forces met 1 mile beyond the Tenambu River southeast of Cape Esperance. From the west the 2d Battalion of the 132d Infantry had pushed north and east against scattered resistance, following its initial landing near Verahui. Driving westward was the 161st Infantry. At approximately 1600 the two forces met and thus ended the ground campaign for Guadalcanal.1 There still were bands of Japanese, both armed and unarmed, which were isolated in the hills, but these could be dealt with in due time. The main force of the enemy pulled out, and all who could not reach the beaches to be taken aboard the Express were abandoned. During the first week of February the Jay had sent down three large forces of destroyers to evacuate the remaining forces on Guadalcanal.2 Torpedo and dive bombers, escorted by P-38's, P-39's, P-40's, and P47's, struck hard at the Express on the first, and something like a major air battle developed. The Jay had provided a cover of 30 Zeros, of which 12 were shot down in the first clash near Savo Island. But despite all air opposition against this and the two succeeding Expresses, the enemy's vessels were able to break through to pull his forces back up to Buin.3

The ground campaign in the Solomons had completed its first milestone. Now it was possible for the division commanders to rest...
their men, to analyze the performance of units and weapons, and to prepare for the next step northwest. First was the move from Guadalcanal to the Russell Islands, which lay only 65 miles north of Henderson Field. Although the distance was not great, it was apparent that occupation would deny the area to the enemy, provide better fighter protection for the assault on Munda, strengthen the defense of Guadalcanal, and furnish a strategic point for landing craft and PT boats. For the occupation a fresh division was chosen, the 43d, under Maj. Gen. John H. Hester. On 21 February elements of this division went ashore on Banika Island without opposition, and immediately construction of a fighter strip was begun. By 15 April both landings and take-offs were accomplished and 2 days later the rolled coral strip was ready for occupation.

If the ground forces relaxed temporarily, the air forces did not; their campaign continued to gather momentum. Certainly there was no evidence that the Jap was disheartened by his loss of Guadalcanal. On the contrary, the first missions after the Japanese withdrawal encountered new and heavy defenses in the Northern Solomons, both from antiaircraft fire and from increased fighter opposition. Photographs taken in January and February indicated intense construction activity, especially in the appearance of blast pens and dispersal lanes, whose number was regarded as "phenomenal." Between 15 December 1943 and 15 January, the enemy more than doubled his dispersal facilities; one month later these had increased another 50 per cent, so that by 15 February there was shelter for 245 aircraft
as compared to 72 on 15 December. Kavieng and Rabaul both showed the result of intense effort by the enemy's construction crews, which led the photographic interpreters to conclude that from Munda to Kavieng the Japanese could shelter by mid-February no less than 461 aircraft. Furthermore there was a significant change in type of installations. From August through mid-November, Japanese bombers attacking Henderson had come down from Kavieng and Rabaul; few if any had been based in the Solomons, and nowhere in the Solomons were there bomber blast pens. Now there were no less than 72 blast pens available for two-engine bombers, 44 at Munda and Ballale, 18 at Eula, and at least 10 at Kahili. Everywhere there were increased antiaircraft installations, searchlights, and most dangerous of all, many more fighters.

In face of this situation, the heavy bombers resumed their daylight attacks on 13 February. On 11 and 12 February, 9 PB4Y's and 9 B-24's had moved up to Guadalcanal from Espiritu, replacing the B-17's which were withdrawn from the forward area at the same time. Among them were 6 new B-24's of the 424th Bombardment Squadron (H), which had reached Guadalcanal on 11 February, led by Maj. Edwin Greene. Now it was their turn to share the burden so long borne by the 5th and 11th Groups. All 6 planes left Henderson on the morning of the 13th, led by Col. Frank Everest, and escorted by 4 P-38's and 7 P-40's. The target was the shipping at Shortland, a dangerous spot now. Engine trouble forced 3 P-40's to return before they reached the target. Two P-38's turned back just short of Buin, but the formation pressed on.
Ahead of the formation was the first strike of 9 FE-4Y's, escorted by 4 P-38's and 11 of the Marines' new Corsairs, which were making their first appearance as long-range escort planes. Over the target area at 1130 the heavy bombers found one large cargo vessel underway, dropped their 54 x 1,000-pounders and secured no hits. Nor were they disturbed by the 6 Zeros sighted. Shortly after noon the AAF B-24's attacked from 14,000 feet, securing one direct hit upon a cargo vessel out of 36 x 1,000-lb. bombs dropped. Now the Jap retaliated. Over the area he had at least 30 Zeros and 15 float fighters, plus the support of heavy flak from naval vessels in the harbor. Lt. George Traeger's B-24 disintegrated over the target as the result of a direct hit. A P-40 went down amid the flak. Another heavy bomber, piloted by Lt. Russell Rowe, received a hit after reaching the target and fell behind, soon to crash flaming into the sea. Still a third, that of Lt. Harold G. McReese, dropped out of formation with a wing and one engine afire. Fighting off 10 or 12 Zeros, the pilot crossed Choissul to make a successful water landing off the north coast of that island, protected in part by the P-38 of Lt. Robert F. Rist, who destroyed 3 Zeros before he was shot down. For nearly an hour the Zeros continued the attack against the surviving planes. On the run down the Slot no more aircraft were shot down, but because of excessive maneuvering, all 3 of the remaining P-38's exhausted their fuel before reaching their base and were forced to make water landings. Thus the entire P-38 escort was lost.
The B-24's had paid a stiff price in their initial mission.

Three of the 6 had been lost, together with most of their escort.

The single hit on the transport and the 3 Zeros destroyed softened the loss only slightly, for the exchange was heavily weighted in favor of the Jap. Next day the Liberators tried again. Nine more went up to Buin, accompanied this time by 10 P-38's and 12 of the Marine's new F4U's. Again the Jap sent up 45 fighters to intercept, and again the cost was heavy. One B-24 was shot down in a head-on attack, another crash-landed off New Georgia; 2 of the Corsairs went down, while the 339th Fighter Squadron, on one of its blackest days, lost 4 of its P-38's. Bombers and escorts had shot down 12 Zeros and the B-24's sank a large cargo vessel 2 miles off Kahili, but the price was too high. It was immediately apparent that operations of this type could not long be sustained. Consequently on 14 February daylight attacks on the Buin area were discontinued until more adequate fighter coverage could be provided.

Henceforth throughout the spring, the B-24's became night raiders, harassing Vila, Munda, Kahili, Ballale, and Fusave, never in any great strength and nearly always at night. Losses dropped immediately, but so did the effectiveness of the bombing. It would not improve until heavily escorted missions once again could strike the ships at Buin in broad daylight. The Jap had dug in; he was prepared to fight a stubborn holding battle all along the chain of islands leading north to Rabaul, and operational statistics lent emphasis to this conclusion. For the first time in the history of
the Solomons campaign, during the last week of February the score of aircraft destroyed in combat favored the enemy: the Jap lost 3, U. S. forces 5.\textsuperscript{19} For the entire month the score of the fighters was favorable, but the margin was by no means so wide as it had been in September and October. A total of 40 Jap aircraft had been destroyed in February, for a loss of 30 U. S. planes, although 11 pilots had been rescued.\textsuperscript{20}

Throughout February every type of plane on Guadalcanal continued to strike at Munda, yet the Jap seemed capable of absorbing terrific punishment; on 15 February returning pilots could report a total of 40 planes on the field.\textsuperscript{21} Range was no problem. The target lay only 196 miles distant, and gradually the air offensive gained momentum. Fighters and bombers struck at the enemy's strip in daily missions, and at night, as well, so often as the weather would permit.

Over all these operations the AAF exercised only limited control, despite activation of the Thirteenth Air Force on 13 January 1943. On 26 December 1942, Brig. Gen. Francis P. Halsey had become Senior Naval Aviator on Guadalcanal, exercising direct control not only over the Second Marine Aircraft Wing but also over all other aircraft on the island, regardless of service.\textsuperscript{22} With the growth of air strength on the forward area, this organization apparently proved unsatisfactory. On 1 February General Halsey assigned to the Commanding officer of Marine Aircraft Group 12 the additional duty of Fighter Commander, a position filled by the latter until 25 July. The fighter commander was charged with operational control of all Army, Navy, Marine Corps, and New Zealand fighter squadrons based
on Guadalcanal, and later on the Russells. A further step in the
growth of the unique air command in the Solomons occurred on 16
February, when Rear Adm. Charles F. Mason, with four staff officers,
assumed command of all aircraft on the island. The nascent unit
was known as "Air Command, Solomons," but it soon acquired the
abbreviated title of COMAIRSOLS. With General Mulcahy providing
continuity as Chief of Staff, the new organization rested initially
upon the old Second Marine Wing; later it developed a more independent
structure and included representatives of the AAF, Navy, and Marines. This was the command which now was sending the heavy bombers up
to Bougainville, and the heterogeneous mixture of planes to Munda.
On some missions, the strike would be all Marine, with Wildcats
and Corsairs providing the escort for TBF's and SBD's. Again, many
strikes involved only AAF planes; nearly all the B-26 missions to
Munda were escorted by P-39's, often covered by P-38's. But with
equal frequency the services were pooled; AAF fighters flew along-
side TBF's, SBD's, the New Zealand P-40's, and both types of Marine
fighters. The task of welding this conglomerate air force into a
smoothly functioning organization was not an easy one. It was not
achieved at once. There were problems of supply, of administration,
and of combat technique which faced the staff of COMAIRSOLS for
many months, but none proved insoluble. Marine fighter pilots fly-
ing their Corsairs on long-range escort missions furnished a problem
in air discipline during the initial weeks of operation of these
planes. In Marine eyes the mission was to shoot Zeros. Under stress
of attack there was a tendency to leave the bombers in order to get on with the business of knocking down the Jap. There was little, if any, such trouble with the AAF escort, and none at all with the Navy fighters, who maintained excellent air discipline. The New Zealanders were beyond criticism. Their P-40's flew perfect missions, their pilots were very modest as to their achievements, and they cooperated in every possible manner.

Problems of supply arose, particularly in the provision of aircraft ammunition for all four services on Guadalcanal. Because of the limited space available, only one bomb dump was built, which then was supervised by the Marine Air Group. But there was only one dump, and soon it became virtually impossible to segregate bombs procured by the Army, the Navy, and the Marines; everything was poured into the same pile. Each service had its own supply representative responsible for procurement of ammunition for his own aircraft, yet under the pressure of day and night raids by the enemy and hectic hours of unloading from the ships, normal procedures broke down.

"There was so much to do—and so few trucking and unloading facilities to handle the tremendous volume—that the main objective was to get the stuff ashore and to hell with paper work." As the bombs piled up in the dump, it became apparent that the source of supply made little difference to the Jap; all four services began to draw upon the single dump. Resupply was another problem. The services were engaged in a combined tactical operation; to sustain it they would have to establish a combined supply operation. So long as
each service ordered independently through its own supply channels, there was constant danger of omission or duplication; some items were ordered in triplicate, others not at all. To overcome this confusion, Lt. Col. W. F. Tinsley drew up a plan for coordination of all orders through his office, which then became a clearing house for all services on Guadalcanal. By local consent the plan was approved and was put into effect in March. 30

By such methods some of the difficulties of joint operations were eliminated, but success was dependent to a large extent upon the personalities of the staff of COMAIRSOLS. Much remained to be done before the Solomons air forces could function at full efficiency. 31

Through January and February the 5th and 11th Groups, with their B-17's, had carried on from Espiritu Santo and Guadalcanal. In January the bombers had destroyed 9 enemy aircraft, damaged 4, and secured hits on 8 ships out of 412 bombs dropped. During the following month the B-17's encountered 31 Zeros in combat, destroying 11 of the enemy fighters. Only 3 cargo ships were attacked, out of the 85 bombs dropped, 8 were direct hits on 2 vessels. 32

The search pattern continued, both from Espiritu Santo and Guadalcanal; on 21 days of the month the B-17's searched 4 sectors from Espiritu Santo, and on 11 others they covered long areas out from Henderson, in addition to completing 11 special searches from both islands. 33

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By the end of February AAF units had been engaged in the Solomons for slightly more than 7 months. The pioneer period was drawing to a close. What were its lessons? Whatever was accomplished must be judged in light of two major factors: at no time did the AAF exercise operational control over its own aircraft, and at no time were the air and ground personnel able to escape the damaging effects of combat amid primitive conditions.

The first factor is quickly explained. The South Pacific was a naval theater; admirals commanded both its air and surface forces, regardless of parent service of the units involved. So often as necessary, General Harmon attempted to advise and guide the naval commanders with respect to the proper operation of AAF aircraft, and from Admiral Halsey he secured excellent cooperation. There were AAF representatives on Halsey's staff, while others were affiliated with the nascent organization of COMAIRSOUS. But the ultimate achievement of such cooperation was limited; never was there operational autonomy for the AAF units, and never did they have any control over the supply lines which kept them alive. The result was a severe handicap upon their operations, not only from the forward area on Guadalcanal but also from Espiritu Santo.

Personnel of all services were hard hit by the primitive conditions in the forward areas. Malaria was the primary scourge of the area, but much more than malaria lowered the efficiency of the fighter pilots and ground crews on Guadalcanal during the early months of the campaign. On Henderson Field there were the shellings,
the nightly bombings of Washing Machine Charlie, and the limited food supply. With little sleep at night—or none at all—and with physical comforts non-existent, pilot fatigue was all out of proportion; here men flew in combat who under normal conditions would have been grounded. These men in the area who had operated aboard carriers realized better, perhaps, than any one else the true nature of the hardships. Lt. Comdr. Leroy C. Simpler attempted to point this out on his return from Guadalcanal when he stated flatly that pilot fatigue was "not properly understood. A man's 'guts' is directly proportional to how rested he is—nothing more or less. With land based operations in the combat zone, it's much harder to keep rested than it is on a carrier. I'd rather operate off a carrier for two months than from a good stiff land base for one week—because on a carrier you're either resting or you're not, as far as pilots are concerned." Guadalcanal was a "good stiff" base, no question about that. Simpler believed that 5 days of intensive combat was about all that men could stand, but if they were rested at intervals, they might hold out for 3 weeks. Capt. Matt Gardner, USN, chief of staff of COMAIRSOPOAC, agreed with the estimate of 3 weeks, adding that adequate housing facilities for air crews would have extended the combat period. Even so, it was necessary to leave flight personnel in combat for 6 weeks or more because there were no replacements. As a result "we have lost the usefulness—of a large number of people we brought out," which included the first four marine squadrons on the island. Then evacuated, all the remaining pilots
in Marine Aircraft Group 23 were incapable of rehabilitation in the South Pacific and were returned to the United States. 39

Much of the campaign's record is a series of pleas for more reinforcements. There was nothing unique in this; commanders of nearly every theater felt that they could use more men and materiel. But in the South Pacific the margin was painfully slim. Henderson Field was seized and developed at a time when the guiding principle of the AAF was to build up the air forces. 40 Air commanders in the field faced the Jap and thought in terms of their immediate problem. Air commanders in Washington were interested no less in the theater, yet they could not overlook the fact that the South Pacific was but one of many theaters, all clamoring for planes and pilots. There were not enough of either to go around.

Within the framework of the above limiting factors, it is possible to conclude that in the South Pacific the heavy bombers could not stop the Japanese advance. Here was an area in which there were no strategic targets, as the item is generally understood; the centers of Japanese production lay far beyond the reach of any bomber based upon Guadalcanal. Instead, nearly all targets were tactical. What is more, those possessing the highest tactical priority—surface craft—were precisely the ones which the heavies proved unable to hit with any reasonable degree of consistency, as Colonel Saunders quickly discovered. This is not to state that the B-17's failed entirely to hit ships from moderately high altitudes. They did hit them, but at such an expenditure of effort and with such a large
percentage of error that the Jap could afford to absorb all such losses and continue his advance.

The reasons for this already have been stated in part. It is very probable that had the X-17's operated from reasonably permanent bases, well supplied with materiel and training facilities, their scores would have been higher. Yet no weapon can be assessed accurately by its performance under parade-ground conditions. Island warfare in the South Pacific permitted realization of none of these ideal conditions. Island bases were not ready in time to permit mass attack, even had the planes been available; in short, the theater could not physically support the number of planes necessary to assure fatal hits on advancing enemy convoys.

What did stop the Japanese in the crisis? The answer lies in the record of all the services. General Kenney's bombers hindered them at the focal point of Rabaul, and occasionally at Buin. The Navy's cruisers and battleships shattered their heavy escorts and drove them away from "Sleepless Lagoon." The epic defense and subsequent offensive operations of the Marines and Army ground forces broke the assaults of those enemy units which actually reached Guadalcanal. As often as fuel permitted, the 11th and 5th Groups struck north from Henderson Field, enjoying better success against anchored vessels than against those underway. But once the cargo ships and transports began to move down the Slot toward Guadalcanal, the burden of air defense was thrown upon the short-range TBD's and SBD's of the Navy and Marines. The AAF was in the peculiar position of being
called upon to provide fighter cover with its P-39's for the dive bombers, which its own headquarters had judged to be unsuitable for the South Pacific. Yet the dive bomber, despite its vulnerability, proved to be a deadly weapon against all ships within 200 miles of Guadalcanal, and there is no reason to believe that AAF crews could not have made as brilliant a contribution to the defense of Guadalcanal as did the Marines. As a matter of fact, the 67th Fighter Squadron resorted to the less satisfactory expedient of employing inadequate fighters as dive bombers. Fighter-bombers later were to become a most effective weapon against enemy shipping, but under conditions which permitted a more adequate training of personnel and the adaptation of improved equipment. On Guadalcanal the AAF originally had only the obsolete P-40's whose record, together with that of the later P-39's, in the long run could hardly compete with that made by the SBD crews which had been trained in dive-bombing technique from the outset.

Guadalcanal was safe. Men and machines of all services had been strained to the utmost to make it so, succeeding only by the narrowest of margins. In all the months of the campaign the AAF had been forced to play a secondary role; requirements of global war had made this a minor theater, while under local command structure, the AAF was a minor service. But within the limits granted it, the air force had worn out its machines and exhausted its men in the common effort to hold the island. Now, with fresh forces on the way and with increased facilities on Guadalcanal, there was hope that Army air would play a more vital role.
**GLOSSARY**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFACT</td>
<td>AG/AS, Training</td>
</tr>
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<td>AG/AS, A-4</td>
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<td>AG/AS, Plans</td>
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<td>Deputy Chief of Air Staff</td>
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<td>AG/AS, Intelligence</td>
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<td>Historical Division, AG/AS, Intelligence</td>
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<td>AG/AS, Statistical Control</td>
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<td>Directorate of Base Services</td>
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<td>Operations Division, AG/AS, Operations, Commitments, Requirements</td>
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<td>AFROSC</td>
<td>Directorate of Communications</td>
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<td>Office of Adjutant General</td>
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<td>ASC</td>
<td>Overseas Section, Supply and Maintenance Branch, AG/AS, Material, Maintenance, and Distribution</td>
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<td>CHINCPOAC</td>
<td>Commander in Chief, U. S. Pacific Fleet</td>
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<td>CCHARDSOLS</td>
<td>Air Command, Solomons</td>
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<td>CCHASCPOAC</td>
<td>Commander, Aircraft South Pacific Area</td>
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<td>Royal New Zealand Air Force</td>
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<td>Services of Supply</td>
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<td>SPINTU</td>
<td>South Pacific Photo Interpretation Unit</td>
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<td>USATISFA</td>
<td>U. S. Army Forces in South Pacific Area</td>
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<tr>
<td>VF</td>
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<td>Marine Fighter Squadron</td>
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<td>Marine Scout Bomber Squadron</td>
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<td>VTB</td>
<td>Navy Torpedo Bomber Squadron</td>
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Introduction


2. CI-IN-5463 (18 July 42), Exmons to CD CSA, A162, 16 July 42.


4. Ibid.

5. CI-IN-5445 (20 May 42), Exmons to CD AAF, A161, 20 May 42.


7. CI-09-0221 (1 July 42), Marshall to Exmons, $4530, 1 July 42; CI-IN-5516 (10 July 42), Ft. Shafter to VCAPA, $14C53, 10 July 42.


9. CI-IN-5710 (25 July 42), COMSOFAC to CONTASKFORCE 62, 63, ALL CONCERN IS RHSIS SOFAC, 270610 NOR 954; CI-IN-2510 (27 July 42), COMSOFAC to USDCA, $236, 26 July 42.

10. Interview with Brig. Gen. L. G. Saunders, 14 April 1943; History of the 11th Bombardment Group (H). Ground personnel left Hawaii on 21 July aboard the President Tyler, arriving at Espiritu Santo on 11 August.

12. Ltr., Gen. Harmon to Gen. Arnold, 28 Aug. 1942, in AFIHI files. The P-400 was similar to the F-23D-1. Its armament consisted of one 20-mm. cannon, two synchronized .50-cal. machine guns, and four .50-cal. wing guns.

13. OK-IX-1674 (9 Sep. 43), Emons to WDJS, #2706, 4 Sep. 43.

1. Incl. (ltr., Gen. Harmon to Gen. Arnold, 6 June 1944), "The Army in the South Pacific," in AFHRA files. This is a brief narrative history of the development and organization of army forces in the South Pacific written by COMAIRSOPAC in the spring of 1944, prior to his departure from the theater. Holsey and his staff established flag and administrative headquarters ashore on 17 November, COMAIRSOPAC Intelligence Bulletin, 17 Nov. 1942, in USCG Hist. Div. files.


3. "Performance, Results, and Attrition of B-17 Heavy Bombers in Solomon Islands Operations, August and September, 1942," Hq. 7th Air Force, 20 Oct. 1942, in A-3 Lib., British Empire (Solomon Islands). Cited as "Performance of Heavy Bombers in Solomon Islands." This record was submitted by Lt. Gail J. Buehler, Naval Air Combat Intelligence Officer, based on the available record of the 11th Bombardment Group (H) and on personal interviews.

4. Ibid. An aggregate of 450,750 miles was flown on search alone in this period, plus another 204,175 miles for special striking missions.

5. Interview with Brig. Gen. L. G. Saunders, 14 April 1943, in AFHRA, Off. Serv. Div., WP-I-L, General Saunders, then a colonel, commanded the 11th Bombardment Group (H) during its pioneer days in the South Pacific.

6. CI-I-9261 (21 Sep. 42), Harmon to Arnold, #253, 21 Sep. 42.


8. Ibid.


11. CI-II-1900 (5 Sep. 42), Harmon to Marshall, #2067, 4 Sep. 42.

13. Ibid.

14. CH-IX-7017 (17 Sep. 42), Harmon to Marshall, #291, 16 Sep. 42. One plane failed to return from this mission.

15. CH-IX-6646 (16 Sep. 42), Harmon to Marshall, unnumbered, 14 Sep. 42.


17. CH-IX-6646 (16 Sep. 42), Harmon to Marshall, unnumbered, 14 Sep. 42.


21. A-3 and A-3 Report of 11th Bomber Command Group in South Pacific, 30 Sep. 1942. Positive hits were secured on one oiler, a GA, a CL, and one DD. Average altitude was 8,200 feet.

22. CH-OUT-5191 (15 Sep. 42), Marshall to CG Hawaiian Dept., #155, 15 Sep. 42.

23. CH-OUT-5574 (16 Sep. 42), Marshall to CG Hawaiian Dept., #171, 16 Sep. 42.


26. CH-IX-0752 (17 Oct. 42), Harmon to Arnold, #687, 17 Oct. 42. The F-400's and P-39's were improvising as dive bombers.

27. CH-OUT-05912 (19 Oct. 42), Marshall to CG Hawaiian Dept., #778, 18 Oct. 42.
28. History of the 31st Bombardment Squadron (H), April 1944, in AFHIS files. From 7 April to 20 April 1944, the 5th Group transferred from Guadalcanal up to Komo Airfield in the Admiralties.

29. CM-IN-08126 (19 Oct. 42), Harmon to Marshall and Emmons, #711, 19 Oct. 42; CM-OUT-09312 (26 Oct. 42), Marshall to CG Hawaiian Dept., #980, 27 Oct. 42. This was the ground echelon of the 31st Bombardment Squadron (H).


31. Ibid.; CM-OUT-10689 (31 Oct. 42), Marshall to Emmons, #1086, 31 Oct. 42; CM-IN-4606 (11 Nov. 42), Emmons to Marshall, #4170, 10 Nov. 42. Admiral Nimitz had requested approval of OPNAV for transport on the President Tyler on 30 October.

32. CM-IN-4509 (11 Nov. 42), Emmons to Marshall, #4170, 10 Nov. 42; interview with Col. Brooke Allen, 13 Sep. 1945.

33. CM-IN-6299 (14 Nov. 42), Emmons to Marshall, #4248, 13 Nov. 42; CM-OUT-5524 (18 Nov. 42), Marshall to CG Hawaiian Dept., #1350, 17 Nov. 42.

34. "Growth of Heavy and Medium Bombardment Units in the Seventh Air Force, 7 December 1941-31 August 1944," in AFHIS files.

35. Ibid.; CM-IN-10039 (26 Nov. 42), Harmon to AGWAR, #1414, 22 Nov. 42.

36. CM-IN-13877 (20 Oct. 42), Emmons to WDCSA, #3664, 28 Oct. 42; CM-IN-08977 (28 Nov. 42), Emmons to CG AAF, #4429, 20 Nov. 42; CM-OUT-8747 (27 Nov. 42), Marshall to Emmons, #1575, 25 Nov. 42. This of course facilitated authority already granted Nimitz to move all army and naval aircraft in the Central and South Pacific at his discretion.

37. "Growth of Heavy and Medium Bombardment Units in the Seventh Air Force, 7 December 1941-31 August 1944."

38. Cited in ibid.


43. Interview with Brig. Gen. L. G. Saunders, 14 April 1943.

44. CX-IN-1830 (5 Oct. 42), Harmar to Marshall, #494, 4 Oct. 42; CX-IN-2175 (6 Oct. 42), Harmar to Marshall, #503, 5 Oct. 42.

45. CX-IN-2996 (8 Oct. 42), Harmar to Marshall, #533, 7 Oct. 42.

46. CX-IN-06795 (16 Oct. 42), Harmar to Marshall, #637, 15 Oct. 42.


48. Ibid., 2-4. Helena and Duncan joined off Rennell Island on the 10th, and McCalla came up the next day to join San Francisco, Salt Lake City, and Boise.

49. Ibid., 6. From action reports of his ships, Admiral Scott estimated that he opposed 3 CA's, 1 CL, and 6 DD's.

50. CX-IN-06143 (15 Oct. 42), Harmar to Marshall, #4306, 14 Oct. 42.

51. CX-IN-08795 (16 Oct. 42), Harmar to Marshall, #637, 15 Oct. 42; Eq. USAFISPA, GO #28, 5 Jan. 1943.

52. CX-IN-08795 (16 Oct. 42), Harmar to Marshall, #637, 15 Oct. 42.

53. D-2 Journal, 1st Marine Division, 13 Oct. 1942, in USMC Hist. Div. files; History of the 67th Fighter Squadron. At 1130, 42 F4F's, 7 P-39's, and 6 P-40's took off to intercept enemy bombers; but lack of warning held down the score to 1 Jap bomber and 1 fighter, both shot down by the Marines.


Colonel Saunders estimates it lasted for 2½ hours. Ira Wolfert states that the bombardment was not lifted until shortly before dawn. Ira Wolfert, *Battle for the Solomons*, 46.

57. War Diary, MAG-25, 14 Oct. 1942; History of the 67th Fighter Squadron.

58. Interview with Brig. Gen. L. G. Saunders, 14 April 1943.

59. History of the 67th Fighter Squadron.

60. Information on the exact number of planes to leave Guadalcanal on the morning of 14 October varies. General Saunders states that there were 12. The 67th Fighter Squadron History places the number at 6. Since there were 15 bombers on the field the previous day, and inasmuch as 4 were left behind, it would appear that 11 B-17's returned to Espiritu. Interview with Lt. Col. Harve Whitaker, by author, 23 Oct. 1944.


62. Ibid.

63. War Diary, MAG-25, 14 Oct. 1942.

64. Quoted in History of the 67th Fighter Squadron.

65. Huie, *Em Da*, 44. The field was first used on 9 September. Merillat, *The Island*, 109.

66. History of the 67th Fighter Squadron.

67. Ibid.

68. The score of aircraft lost to the shelling of 14, 15, 16 October was as follows:

- **F4F-4's**: 6 destroyed, 3 damaged and repaired
- **SBD's**: 13 destroyed, 13 damaged and repaired; 10 damaged and given major overhaul
- **TF7's**: 5 destroyed, 3 damaged, requiring major overhaul
- **P-39's**: 4 destroyed

War Diary, MAG-25, 15 Oct. 1942.

69. History of the 67th Fighter Squadron.

70. Merillat, *The Island*, 152-153. Several thousand additional gallons of gas came in on the *MacFarland* on the 16th. Ibid.

72. War Diary, MAG-23, 15 Oct. 1942; History of the 67th Fighter Squadron, 1st Lt. J. E. Norton was lost here.

73. War Diary, MAG-23, 16 Oct. 1942.

74. Quoted in History of the 67th Fighter Squadron.


76. CM-IN-09969 (23 Oct. 42), Herson to Marshall, #7619, 22 Oct. 42.

77. Ibid.


79. Ibid.

80. Ibid.

81. N. Y. Times, 18, 19 Oct. 1942; War Diary, MAG-23, 23 Oct. 1942. Lack of information concerning Guadalcanal had contributed to the failure of the public and of Congress to appreciate the magnitude of the difficulties in the area.

82. The destroyer Meredith was lost in this action.


84. CM-OUT-04839 (15 Oct. 42), AFACT to Hale, #704, 15 Oct. 42.


86. CM-IN-11300 (26 Oct. 42), Emons to WDSFA, #3354, 26 Oct. 42. On 24 October the air echelon of the 93d Squadron left Mareeba for New Caledonia, then moved on to Fiji, where it remained for 7 days. It finally arrived in Hawaii about 1 November. See History of the 93d Bombardment Squadron (H), (December 1941 to January 31, 1942), in AFTI1 files.
67. CW-IL-09053 (21 Oct. 42), 4609 to WDS5, #3674, 20 Oct. 42;
CW-IL-10164 (24 Oct. 42), 4409 to WDS5, #3780, 26 Oct. 42;
CW-IL-11700 (27 Oct. 42), 4409 to WDS5, #3937, 26 Oct. 42.

memorandum for G-3 AAF, "86th Bombardment Group (E)," 31 Oct. 1942, in

memorandum for G-3 AAF, "F-53's, from Australia to South Pacific
Area," in ibid.; incl. (28R, Gen. Anderson to Gen. Arnold,
in ibid. It was pointed out that the F-53's must maintain a
minimum speed of 200 knots to prevent fouling of plugs.

Serv. Div., "F-IV-E-7, New Caledonia. These pilots were members
of the 23rd Fighter Squadron, men who had served their
apprenticeship against the Jay on Guadalcanal in the F-400's
of the 67th Fighter Squadron.

1942. Fighter aircraft available for 26 October were as follows:
P-400 3 out of 6
P-39 3 out of 6
F4F-4 12 out of 25

By 29 October there were available for the next day's operations
the following aircraft:
P-400 2 out of 4
P-39 2 out of 4
F4F-4 30 out of 34
SBD 16 out of 25

War Diary, MAG-23, 29 Oct. 1942.

72. Ibid., 28 Oct. 1942.

73. "Enemy Operations on Guadalcanal," Capt. John A. Burden, USMC,
in AAF, Combat Analysis Subsection.

74. Ibid.; "Brief Summary of the Battle for Guadalcanal," Combat
Intelligence Center, Box XIV Corr., G-2 Section, 12 Feb. 1943,

75. History of the 67th Fighter Squadron.

76. CW-IL-18116 (26 Oct. 42), Harman to Marshall, #690, 26 Oct. 42;
War Diary, MAG-23, 26 Oct. 42. Marine SBD's had hit this
force at 1500. The F-53's were from the 34th Fighter Group
Detachment (67th Fighter Squadron).


99. CM-IN-00244 (1 Nov. 42), Harmon to Marshall, #945, 30 Oct. 42.

100. "Battle of Santa Cruz Islands," OMI Combat Narratives, 53.

101. Ibid.

102. CM-IN-11552 (27 Oct. 42), Harmon to Marshall, #860, 27 Oct. 42; CM-IN-1238 (3 Nov. 42), Harmon to Marshall, #1021, 3 Nov. 42; CM-IN-1239 (3 Nov. 42), Harmon to Marshall, #1042, 3 Nov. 42.

103. Comment #2 (R&R, AIFJP to AIFJP, 4 Nov. 1942), AIFJP to AIFJP, n.d., in AAG 370.22A, Campaigns and Expeditions. The following units were permanently assigned to the South Pacific Area:

- 65th Bomb. Sq. (H)
- 67th Bomb. Sq. (H)
- 67th Fighter Sq.
- 13th Troop Carrier Sq.
- 68th Fighter Sq.
- 70th Fighter Sq.
- 339th Fighter Sq.

Units operating temporarily in the South Pacific, but not assigned:

- 11th Bomb. Gp. (H)
- 44th Fighter Sq.
- 12th Fighter Sq.
- 72d Bomb. Sq. (H)
- 23d Bomb. Sq. (H)


106. Ibid.; CM-IN-1275 (4 Nov. 42), Harmon to Marshall, #1024, 3 Nov. 42. This was the 236th Infantry Regiment.

107. CM-IN-3703 (9 Nov. 42), Harmon to Marshall, #1185, 9 Nov. 42; History of the 67th Fighter Squadron. One member of the 67th suggested that the unit be redesignated the 67th Bombardment Squadron (Very Light).

108. War Diary, HAG-33, 3 Nov. 1942.
109. Daily Intelligence Summaries, Hq. 1st Marine Division, 8 Nov. 1942, in AGO, Combat Analysis Subsection, 501-20.1, cited as Daily Intelligence Summaries; D-2 Journal, 1st Marine Division, Vol. VI, 7 Nov. 1942; History of the 67th Fighter Squadron. Two of the enemy planes were float Zeros, three were float biplanes.


111. Ibid., 34. Normal alert was as follows: 20 planes on half-hour alert for 1 hour before daylight; 20 planes on half-hour alert 2 hours after daylight, and then on 1-hour alert until 1330; 6 planes on 1-hour alert after 1330.

112. Ibid., 4.


114. War Diary, NA-23, 11 Nov. 1942; Foster Hailey, Pacific Battle Line, 265. In this action, Betelgeuse and Libra also suffered slight damage. New P-39's shot down a Sally in a later raid on the field.


116. Quoted in History of the 67th Fighter Squadron. No completely accurate reports on enemy losses in this action are available. For example, at nest, 25 bombers were sighted. Landing craft shot down one, and another was seen returning over New Georgia. This left 22, yet 59 sure kills were reported by ships and planes. "Battle of Guadalcanal," OII Combat Narratives, 15. The 67th Fighter Squadron Report is as follows: Bombers: AA fire--3; Grumman--16; P-39's--1; escaped--1. Zeros: Grumman--4; P-39's--1; escaped--3.

117. Atlanta and Juneau were lost; so were the destroyers Barton, Cushing, Laffey, Konsen. The Jan lost a Kongo E3, estimated to be Hyai, a heavy and a light cruiser, and four DD's. On Friday a 3-17 on search passed over the point where Juneau had gone down, dropped all available rations, life rafts, and accessories, and reported the situation to Espiritu Santo. No air contact was maintained over the 120 survivors of Juneau, and only 10 men of the entire crew eventually were rescued.
118. "Battle of Guadalcanal," CBI Combat Narratives, 34. The P-39's belonged to the 339th Fighter Squadron, which General Harmon had been holding in New Caledonia until the unit was fully trained.

119. History of the 339th Fighter Squadron (EZ), Activation until 31 December 1943; Pilot's Combat Report, 2d Lt. Nathan J. Kingsley, Eq. 339th Fighter Sq., 347th Fighter Group, in A-2 Lib., 5th Air Force Combat Reports. Only two ground men were available at this time. Squalls on the way across had necessitated some instrument flying. These pilots received a noisy welcome from the tired troops who lined the runways and cheered the new planes as they landed.

120. "Battle of Guadalcanal," CBI Combat Narratives, 34. It should be pointed out that these aircraft were never all in operation at the same time. A status report of 12/13 Nov. indicated the following aircraft available on Guadalcanal:

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>P-39</th>
<th>P-39-1</th>
<th>P-39-7</th>
<th>SBD</th>
<th>TBD</th>
<th>P-40</th>
<th>P-40-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available</td>
<td>24</td>
<td>0</td>
<td>1</td>
<td>20</td>
<td>6</td>
<td>1</td>
<td>unknown</td>
</tr>
</tbody>
</table>


The report for 15 November had altered as follows:

- P-39: 13 out of 15
- P-39-3: 6 out of 10
- P-40: 0 out of 0

War Diary, MAG-23, 15 Nov. 1942.

121. COMAIRSOPAC Intelligence Bulletin, 24 Nov. 1942. On the return flight, seven P-39's took off from Henderson at 1030, escorted by a B-17. One P-39 was left behind due to engine trouble. The planes did not stop at Milne Bay but continued on to Port Moresby, where they landed at 1630. The B-17 returned to Guadalcanal on 23 November.

122. Daily Aviation Summary, COMAIRSOPAC Intelligence Bulletin, 17 Nov. 1942; "Battle of Guadalcanal," CBI Combat Narratives, 34. Major Collins was pilot of one of the two surviving B-26's which attacked the Jap carrier force at Midway. History of the 66th Bombardment Squadron (P), from January 1942 to 1 July 1943; History of the 99th Bombardment Squadron (P). The Squadron historian of the 59th apparently is in error in stating that his air echelon moved to Espiritu on the 10th.

123. OI-In-6105 (14 Nov. 42), Harmon to Marshall, 11894, 14 Nov. 42. The Navy assumed this ship to be Hiyosi, but the B-17's reported it as a Fuso. Reports on the number of hits varied. Navy said
1 was certain and 5 were possible hits. The first flight of 8 aircraft was forced to drop on a destroyer owing to cloud cover over the BB. Only 16 planes reached the target, the other 3 having become separated from the formation in clouds and having attempted to locate the reported carrier north of Florida Island. All returned safely. Daily Operations Report, 11th Bombardment Group, 13 Nov. 1942, in AFAFP, Off. Serv. Div., WP-IV-H-23, South Pacific; "Battle of Guadalcanal," CBI Combat Narratives, 37. Lt. A. F. Coffin, leader of the Enterprise torpedo planes, is reported to have commented after his second attack on the ship, "Better not let this news get back to Washington or the admirals will start building battleships again." Quoted in Foster Hailey, Pacific Battle Line, 276. Captain Merillat reports 11 torpedo hits on this ship. Merillat, The Island, 208.


125. "Battle of Guadalcanal," CBI Combat Narratives, 40; Air Intelligence Summary, COMINCHOPAC Intelligence Bulletin, 17 Nov. 1942; History of the 70th Bombardment Squadron (H), B-26's left Flaines des Galacs and proceeded to Espiritu Santo. The bombers were refueled first; before the fighters could be readied for flight, the B-26's had taken off and disappeared in the clouds, which necessitated holding the fighters overnight before sending them on. Pilot's Combat Report, 1st Lt. Albert B. Parrydson, 339th Fighter Sq., 347th Fighter Group, in A-2 Lib., 5th Air Force Combat Reports.

126. CFI-II-7611 (18 Nov. 42), Harmon to Marshall, #1318, 17 Nov. 42; "Battle of Guadalcanal," CBI Combat Narratives, 44.

127. History of the 98th Bombardment Squadron (H); Foster Hailey, Pacific Battle Line, 277. This mission gained a DFC for Captain Jobam and created new respect for the "USO crew." The plane had come in at 1600 with only a small shred of fabric left on its tail, yet by 0600 the next morning "Typhoon McGoon" was patched and ready to take off. GO #1, HQ, USAFIPAC, 2 Jan. 1943. "B-17 Performance," Lt. S. S. Savage, USNR, 19 Nov. 1942, in A-2 Lib., 5th Air Force Combat Reports.


129. CFI-II-7611 (18 Nov. 42), Harmon to Marshall, #1318, 17 Nov. 42.

130. History of the 67th Fighter Squadron.

132. History of the 67th Fighter Squadron; COMAIRSOFAC Intelligence Bulletin, 17 Nov. 1942; History of the 70th Bombardment Squadron (H).

133. CI-IN-7260 (17 Nov. 42), Harman to Marshall, 1849, 17 Nov. 42; "Battle of Guadalcanal," CII Combat Narratives, 72. Engine trouble caused one of the flights of B-17's to land at Henderson Field, the first heavy bomber to do so since 14 October. While engaged in the missions against the transports, four P-39's spotted a sinking U.S. destroyer and a large number of personnel in the sea. By forming a line and flying over Heda in the direction of the wreck, they guided the DD to the spot and thus aided in saving over 300 naval personnel. History of the 67th Fighter Squadron.

134. History of the 67th Fighter Squadron.


136. Operations Narrative, Americal Division, 28 May 1945, in AGO, Combat Analysis Subsection, 30 Amer. 11.4.

137. Intelligence Summary #84, Allied Hq. SWPA, 10 March 1943, in AAF D, Off. Serv. Div., II-E, Bk. VI.

138. CI-OUT-5543 (18 Nov. 42), Arnold to Harman, #76, 17 Nov. 42; CI-IN-8703 (29 Nov. 42), Harman to Arnold, #200280 NOR 2723, 30 Nov. 42; CI-OUT-5079 (16 Nov. 42), Arnold to Harman and Kenney, #Rane 2065, 16 Nov. 42.

139. CI-IN-8072 (19 Nov. 42), Harman to Arnold, #1379, 19 Nov. 42; CI-IN-9449 (22 Nov. 42), Harman to Arnold, #1415, 22 Nov. 42.

140. An active month for the defenders of Henderson Field ended on 19 November. During the past month the following ammunition had been expended:

- .50-cal. over 1,250,000 rds.
- 1,000-lb. bombs approx. 500
- 500-lb. bombs approx. 700
- 100-lb. bombs approx. 1,250
- Plane starter cartridges approx. 10,000

Between 13-16 November, 44 aerial torpedoes had been launched at enemy ships. COMAIRSOFAC Intelligence Bulletin, 22 Nov. 1942.

141. The B-26's of the 70th Squadron had been ordered back to Espiritu at noon on 15 November, shortly after the mission against the
burning cargo vessels. All but 2 took off by 1400, but 1 was lost off San Cristobal. Two days later the squadron was ordered to return to Henderson for this mission, but only 3 planes were able to make the flight. One of this number developed engine trouble at CACTUS and could not take part in the mission from Guadalcanal, which left only 4 aircraft available, including the 2 left behind on the 15th. History of the 70th Bombardment Squadron (S).

142. Interview with Brig. Gen. L. G. Saunders, 14 April 1942. One B-17 had taken off at 0500 from Henderson to precede the strike mission to Buin and report on weather and targets. This plane approached at 100 feet or lower to avoid radar, and remained over the target for 1 1/2 hours, reporting to the strike planes. It returned to Espiritu Santo at 1630. Two flights of 5 aircraft left at 0800 and 1610; 1 B-17 piled in mud and bomb craters and was unable to get off. It finally took off at 0645, arriving over Buin after the 10 planes had hit the target.


145. C-111-12527 (29 Nov. 42), Harmon to Marshall, #1569, 29 Nov. 42.

2. CI-IN-12009 (31 Aug. 42), Harmon to Arnold, 4170, 31 Aug. 42.

3. CI-OUT-3262 (9 Sep. 42), AFASG to Harmon, 51280, 7 Sep. 42; CI-OUT-3287 (10 Sep. 42), AFASG to Nescal, 51294, 9 Sep. 42.

4. Incl. 41 (memo for CG's of all Air Forces by AFIBI, 21 Nov. 42), extract from letter of 11th Bombardment Group Commander to AAFHQ, n.d., in AFAFP, Off. Serv. Div., WP-IV-H-23, South Pacific. This letter was written after the mission of 18 November. Saunders believed installation of the Bendix chin turret would prove effective against frontal attacks; the turret permitted fire of 160° azimuth, 50° depression, and 30° elevation. RAR, General Arnold to General Eichel, "Operations of 11th Bombardment Group, 17 Dec. 1942, in AAF 370.2A, Operations and Reports. On 27 January General Stratemeyer explained to Saunders, then home in Aberdeen, S. D., that improvements were being made, but "We are always building tomorrow's planes today--today's planes yesterday."


7. 1ltr., Gen. Harmon to Adm. Halsey, 20 Nov. 1942, in AAG 312.1-A, Operations Letters. Apparently there had been some criticism of the altitude from which the bombing was done, since General Harmon explained at length that the P-47's on 14 November had been assigned two CV's as primary targets. Hence, expecting heavy AA fire with its attendant turbulence, they bombed from 17,000 to 20,000 feet. Having approached at high altitude, it was too late to descend when the targets were identified as large AF's instead of CV's. "The point apparently missed by the flight leaders was that this was one of these days when all profitable targets should have been attacked at optimum bombing altitudes regardless of enemy action." ibid.

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9. Ibid. General Harmon's feeling toward the B-17 crews was expressed in this letter: "God knows the Group has displayed magnificent bravery and splendid fortitude . . . We cannot, however, accept a limitation to our capabilities but must seek to improve our present and search for new means for his [Jap] destruction."


14. OIL-OUT-8485 (20 Nov. 42), Arnold to Harmon, #Flame 2107, 20 Nov. 42. General Arnold later expanded this exploit of Saunders' in an address at West Point.

15. Interview with Brig. Gen. L. G. Saunders, 14 April 1942. The only targets for which the planes were specifically loaded were the ships in the Buin-Tonolei area. Ibid.

16. Ibid. The normal loading was a 500-1b. bomb with instantaneous fuse, and COMAIRSPACO specified any desired change. There was need for time fuses with varied delay for employment against enemy landing strips. Fuses with a delay of 5 minutes up to 72 hours would have been useful in these cases. General Geiger (Marine Air Commander at Guadalcanal) found that his SBD's, employing 1,000-1b. bombs fitted with one-second delay fuses, sent their bombs completely through transports.

17. Ibid.

18. Ltr., Gen. Harmon to Adm. Halsey, 20 Nov. 1942, in AAG 312.1-A. Completion of Bomber #3 on Espiritu, anticipated in about 10 days, obviously would relieve this congestion.

19. Ibid. This figure rests upon hits confirmed by photographs or by a sufficient number of witnesses to be established as a fact. It omits all hits against beached or anchored shipping. General Harmon cites a total of 29 ships as having been hit with one or more bombs; the group report of 3 December lists only 23.

20. Interview with Brig. Gen. L. G. Saunders, 14 April 1942; OIL-OUT-9647 (23 Nov. 42), Harmon to Arnold, unnumbered, 22 Nov. 42.
Actually through 18 November there were only five missions in which nine or more bombers were dispatched against moving targets.


22. Idid.


27. Idid.


30. General Arnold's original estimate of 68 F3Y's was now reduced to 52.

31. Memo for Adm. King by Gen. Arnold, 2 Dec. 1942, in AFTIH files. This memo was sent on 17 December.


33. Comment by Operational Plans, 30 Jan. 1943 (R&R, AC/AS, A-3 to AC/AS, A-3, 19 Jan. 1943), in AAF 312.1A, Classes of Correspondence. This is a draft of the reply to Harmon's letter of 31 December 1942.

34. On 14 November Capt. James E. Johan contacted two large enemy task forces, identifying all surface vessels present in the face of heavy antiaircraft fire and fighter opposition. This plane destroyed 3 enemy fighters and possibly 2 more. It reached its base with tail surfaces all shot away. On 12 November Lt. Mario Sessio made a carrier contact 350 miles north of Guadalcanal and maintained it for 2 hours, shooting down 6 Zeros in the action before returning safely. See Chapter I.


38. CL-IN-12823 (50 Nov. 42), Harmon to Arnold, #1544, 30 Nov. 42; ltr., Gen. Harmon to the Chief of Staff, 29 Nov. 1942.

39. Interview with Brig. Gen. G. O. Jamison and Col. Brooke Allen, 15 Sep. 1943. General Jamison was a member of the USAFSPA staff; Colonel Allen commanded the 5th Bombardment Group (E).


41. CL-OUT-21460 (7 Dec. 42), Marshall to Harmon, rFane 2232, 5 Dec. 42.

42. FMR, AFRCI to AFSTI through AFINS, 9 June 1942, in AG6, Bulk file.

43. CL-IN-6223 (15 Dec. 42), Harmon to Arnold, unnumbered, 14 Dec. 42.


45. Ibid. Force 9465 was the original force dispatched in July and September to New Caledonia under General Harmon. This message was in error and should have stated that "certain personnel of the Bombardment and Fighter sections . . . of T/O Headquarters, Force 9465, will be transferred to the Thirteenth Air Force." See memo for AG by General Handy, AG/S, 31 Dec. 1942, CPD 320.2 F10 (12-25-43), in AG 322-A.

46. CL-IN-10498 (24 Dec. 42), Harmon to Arnold, #262, 26 Dec. 42. Harmon recommended T/O 1-E00-18-ES, 1 July 1942, for the new units.

47. CL-OUT-7940 (23 Dec. 42), Arnold (AFIPO) to CG SPA, rFane 2511, 23 Dec. 42.

48. CL-OUT-1661 (5 Jan. 43), Marshall to Harmon, rFane 2679, 5 Jan. 43. General Marshall assumed that his authorization of 23 December had not been received, since Harmon failed to acknowledge it. Ibid.

50. Ibid.

51. Memo for AG, CG AAF, CG SOS, by Gen. Hundy, AG/S, "Organization of the Thirteenth Air Force," 31 Dec. 42, OPD 320.2 FTO (12-23-42), in AAG 332.1. The T/O's were as follows:
   Hq. & Hq. Sq. Thirteenth Air Force T/O 1-300-1S-38 (7-1-42)
   Hq. & Hq. Sq. XIII Bomber Command T/O 1-100-1 (7-1-41)
   Hq. & Hq. Sq. XIII Fighter Command T/O 1-200 (7-1-41)


53. CM-IN-2271 (3 Jan. 43), Harnon to Hundy, #131, 7 Jan. 43;
CM-OUT-2187 (6 Jan. 43), Marshall to Harnon, #2939, 9 Jan. 43;

54. CM-IN-7550 (17 Jan. 43), CQGENSEOFAC to AGWAR, #1964, 15 Jan. 43.


56. Interview with Brig. Gen. G. C. Jamison and Col. Brooke Allen, 13 Sep. 1943. Colonel Jamison was subsequently promoted and Colonel Allen commanded the 35th Bombardment Group (H).

Chapter III

1. "Summary of Photographic Intelligence Operations in the South Pacific," Maj. S. W. Smith, 10 March 1944, in AFIHI files. Major Smith was assigned to USAISPA in August 1943 and was intimately concerned with the early organization of intelligence in the South Pacific. He has furnished many of the details concerning the operation of combat intelligence.

2. This unit, under Comdr. R. F. Quackenbush, Jr., reported to COMSOPAC on 15 July 1942. It was based on Curtiss, but maintained an advance echelon at Guadalcanal as early as September 1943. The main unit moved ashore on Espiritu on 1 February 1943. Interview with Comdr. R. F. Quackenbush, Jr., USN, by 2d Lt. Edna I. Smith, USNWR, 3 Oct. 1944, in AFIHI files.


6. CI-IX-7895 (16 Dec. 43), Harmon to Arnold, unnumbered, 16 Dec. 42.

7. CI-OUT-0532 (2 Oct. 43), AFAF to Noumea, 2675, 1 Oct. 43; CI-IX-1639 (4 Oct. 43), Harmon to Stretemeyer, 486, 3 Oct. 43.


9. These two squadrons had been allocated to the South Pacific by the Joint Chiefs of Staff on 1 November; on 23 December COMAIRSPAC requested information as to when they would be ready for service. CI-IX-10501 (24 Dec. 42), COMAIRSPAC to COMSPEAR for SPOAC, 280152 22B 7196, 23 Dec. 42.

arriving at Guadalcanal on 16 January 1943. It began operations in the Guadalcanal campaign on 5 February 1943, flying its missions to Eula, Tul, Vella-Vella, and eventually to Rabaul, all at an average altitude of 23,500–31,000 feet. History of the 17th Photo Reconnaissance Squadron, 1 Jan. 1944. On 2 February, General Harmon reported that the ground echelon of the 18th Photo Reconnaissance Squadron would be ready to operate within 2 weeks. CHK-IN-911 (2 Feb. 43), Harmon to Arnold, #338, 2 Feb. 43.

11. Historical Record of Headquarters 4th Photo Group, Reconnaissance, 1 Oct.-31 Dec. 1943; History of Headquarters, 4th Photo Group, Reconnaissance, from 24 July 1942 through 31 December 1942. This unit debarred at Espiritu Santo on 22 January 1943, moved to San Juan Hill, and was assigned to the Thirteenth Air Force.

12. The following units subsequently were attached to the 4th Photo Group: 17th Photographic Reconnaissance Squadron (Guadalcanal); 955th Engineers Topographic Company, Aviation (Reinf.), stationed on Espiritu Santo—the 4th Group messed with the 955th Engineers; 18th Combat Mapping Squadron, based on Espiritu Santo; 12th AAF Photographic Intelligence Detachment, which arrived at Guadalcanal 16 June 1943. Historical Record, 4th Photo Group, Reconnaissance, 1 Jan. 1944-1 March 1944; interview with Maj. S. W. Smith by author, 19 April 1945.

13. CHK-OUT-1057 (4 Feb. 43), Stretemeyer to Harmon, #3ane 3111, 3 Feb. 1943. The three P-25's were to be withdrawn and employed over unopposed territory.

14. CHK-OUT-3345 (9 Feb. 43), Harmon to Arnold, #3712, 9 Feb. 43; CHK-OUT-3341 (10 Feb. 43), AFAC to Harmon, #3ane 3210, 10 Feb. 43.

15. Comments of Gen. Twining to Directorate of Photorecon., 24 March 1943, in AG 322.1E, Groups. The P-5's were the modified P-25's assigned to the 17th Photo Reconnaissance Squadron. Colonel Hollstein served as commanding officer until 10 July 1943, when he returned to the United States.

16. CHK-OUT-6003 (10 Jan. 43), Harmon to Ulio, #1331, 9 Jan. 43; CHK-OUT-6002 (12 Jan. 43), Marshall to Harmon, #3ane 2371, 12 Jan. 43. This was the 18th AAF Photo Intelligence Detachment, activated 1 February 1943 and immediately assigned to the Thirteenth Air Force. It arrived in Guadalcanal on 16 April, at Guadalcanal on the afternoon of 15 June 1943.

17. Statement of Lt. Comdr. Roger Kent to author, 19 Sep. 1944. Commander Kent assisted in preparing the War Diary for AG-23, which is one of the best existing sources for early fighter operations on Guadalcanal.
18. Interview with Major Van Slyck, 26 March 1943.


21. The Navy maintained a forward echelon of SFPDU on Guadalcanal between Henderson and Fighter Strip #2. As the films were brought into Henderson, they were developed, a few prints were made for rapid interpretation, and a first phase report was mimeographed for distribution to units on Guadalcanal. Normally the negatives would be flown to Espiritu by the next morning and delivered to SFPDU, where a mimeographed second phase interpretation was made and distributed to approximately 70 units. "Summary of Photographic Intelligence Operations in the South Pacific," Maj. S. W. Smith, 10 March 1944.

22. Interview with Maj. Van Slyck, 26 March 1943.

23. "Summary of Photographic Intelligence Operations in the South Pacific, Maj. Smith, 10 March 1944. Major Smith was attached to the A-3 Section of the Thirteenth Air Force and moved up to Espiritu late in January. Colonel Jamison, Chief of Staff, verbally assigned him to duty with SFPDU. Ibid.

24. Ibid.


27. Interview with Maj. Frank O. Brown, by author, 17 June 1944. Major Brown, formerly Assistant A-2 of the Seventh Air Force, was detailed as liaison officer for observation of air and ground combat in the SOPAC and SWPA. Ltr., Maj. Van Slyck to Col. Hunter, 24 Jan. 1943.


29. Following the recent air-naval battles, GOVOSAC was able in part to determine the results by comparing the pre-action reports of vessels sighted heading south with post-action reports from the search planes indicating the number of ships limping back to the north after the engagement. Ibid.
    Serv. Div., II-3, Ex. III; Itr., Lt. Thom to Maj. Brown,
    7 Dec. 1942.

31. CI-OUT-3063 (23 Dec. 43), Arnold to Harcon, #2514, 23 Dec. 43.

32. CI-IN-13589 (30 Dec. 42), Arnold from Harcon, #488, 27 Dec. 42.
The Marine fighter record was even more dramatic, averaging
better than five to one, and on occasion running as high as 20
enemy planes lost for each F4F-4.


    Major Huttig was S-2 of the 18th Fighter Group. Various intelli-
geance officers who served with the Thirteenth Air Force have
estimated the number of returned aircrew members, approximated

to be 80 to 90 per cent of all personnel who were able to make
safe water landings.

36. The number of remarkable rescues is too long to include in this
    study, but the return of Lt. Wallace Dinn with a captured enemy
    pilot is one of the more noteworthy.

37. Vandegrift Report, Phase III, Annex F. Clemens was the first
    white man to come through the Marines lines, which he did on the
    evening of 15 August. By January the coast watchers were a part
    of the Inter-Island Intelligence Service attached to C-2 of the
    Americal Division, and included 20 officers, 5 enlisted men, and
    approximately 200 native scouts. Major Clemens now commanded
    the Native Scout and Carrier Section of 5 officers, 100 native scouts,
    and 100 native carriers. Organization C-2 Section, Eq. Guadal-
    canal, 8 Jan. 1943, in AGO, Combat Analysis Subsection, 30 Amer.
    21.3

38. The C-3 Journal of the 1st Marine Division contains frequent
    reference to reports from the Coast Watchers' network. The
    Journal entry for 8 November, 0700 (from a Bougainville station)
    reads "Have had to move back. Now no view drone. Hope only
    temporary but meanwhile difficult to give usual estimate daily."
    D-2 Journal, 1st Marine Division, Vol. VI, 6 Nov.-21 Nov. 1943,
    in USCG Hist. Div. files.

39. The watcher on Sandfly Island, off Vella Lavella, was invaluable
    for his success in warning the marine defenders on Guadalcanal
    of the size and type of Jap bombing attacks. One of the best
    known watchers was a Mr. Kennedy, who maintained his station at
Segi at the east end of New Georgia; he was one who had a private
native "army" well armed with salvaged weapons from aircraft.
Interview with Maj. W. D. E. Hattig, 15 May 1944.

40. Vandegrift Report, Phase IV, Annex A. These reports were in-
strumental in forcing the evacuation of Gizo Bay on 19 September,
although the Jay then moved his seaplane base to Rokata Bay on
Santa Isabel.


42. CINCPAC War Diary, 24 Dec. 1943, in Office of Naval Records
and Library; "Dumbo Operations in the Solomon Islands, Jan. 1 to
Aug. 15, 1943," 5 Sep. 1943, U.S. Pacific Fleet, SOPACFOR, Intelli-
gence Division, in A-2 Lib.; 13th Air Force Evaluation (1943),
Sep.-Oct. .

43. Ibid. On 16 December 10 men of a B-17 which had been forced down
at sea were picked up from the shore of Tatipari Island; on
23 December an army pilot was rescued off the eastern end of
San Cristobal.

44. Interview with Lt. Comdr. J. O. Cobb, USN, 26 April 1943. This
officer commanded Patrol Squadron 91, one plane of which rescued
General Twining with 16 members of his staff after their B-17
had been forced down at sea. Commander Cobb states that in 6
months of operations his squadron alone rescued 91 airmen.

45. The other pilot was Lt. Joseph A. Lynch of the 66th. Captain
Palmer was shot down 24 hours earlier by an over-zealous B-17
gunner. After he had bailed out, the B-17 dropped a life raft
and a can of water, leaving him to spend an anxious night
under the nose of the Jay base at Suin. History of the 66th
Fighter Squadron, activation to 31 Dec. 1943; CI-IN-9622 (21 Jan.
43), Harmon to Marshall, #2260, 20 Jan. 43. A detailed study of
these activities could be made only by an examination of the
squadron records of VF-11, 24, 44, 72, and 91, all of which
probably had detachments on Dumbo duty at intervals during the
first 6 months of 1943.

46. Interview with Commander Cobb, USN, 26 April 1943.

47. CI-IN-0053 (7 Aug. 42), Harmon to Marshall, #675, 30 July 1942.

48. FFGS Disposition Form, to 66 AAF from Gen. Handy, AG/S, 3 Aug.
1943, OPD 452.1 P20 (7-30-42), in AAG 002-500, Misc. East Indies;
1943, in ibid.
49. CIL-OUT-8119 (26 Aug. 42), CG AAF to Harmon, #1115, 26 Aug. 42; CIL-OUT-4008 (1 Sep. 42), Harmon to Arnold, #1714, 31 Aug. 42.

50. CIL-OUT-1211 (3 Sep. 42), Arnold to Harmon, #1236, 3 Sep. 42; CIL-OUT-5615 (17 Sep. 42), AFRON to Harmon, #1892, 15 Sep. 42. These aircraft accommodated a crew of 2, carried 3 or 4 passengers, and had a range of approximately 500 miles at 155 m.p.h. with 75 per cent power. They were scheduled to be divided equally among Fiji, New Caledonia, and New Zealand.


52. During the campaign's early phases the majority of evacuees were taken out by sea. By 18 September, 147 patients had been removed in aircraft, whereas 701 officers and men had been evacuated in surface craft. Vandegrift Report, Phase IV, Annex B.


54. Vandegrift Report, Phase IV, Annex B.


56. CIL-OUT-9123 (27 Sep. 42), Stratemeyer to Nescal, #1503, 26 Sep. 42; CIL-OUT-11892 (27 Sep. 42), Arnold to Marshall, #500, 27 Sep. 42. General Arnold left Brisbane for Washington on 29 September 1942.

57. CIL-OUT-9404 (29 Sep. 42), AFRON to CG Nescal, #1524, 29 Sep. 1942; CIL-OUT-14692 (14 Oct. 42), AFRON to Harmon, #1589, 14 Oct. 42; CIL-OUT-1200 (3 Oct. 42), AFRON to Harmon, #1592, 3 Oct. 42.


59. CIL-OUT-09115 (21 Oct. 42), Harmon to WDUB, #2710, 21 Oct. 42.


64. History of the Thirteenth Troop Carrier Squadron from 10 Oct. 1943 to 31 July 1944; interview with 1st Lt. Donald D. Eberhart, 27 May 1943; interview with Gen. Vandegrift, 5 Feb. 1943. At one time it was even necessary to drain fuel from the larger planes on the field in order to keep the fighters in the air. History of the 87th Fighter Squadron; Horillat, The Island, 152-153.


66. COMAIRSOFPAC Intelligence Bulletin, 1 Nov. 42, in USMC Hist. Div. files; ltr., Gen. Harmon to Gen. Arnold, 2 Nov. 1942, in AAG 312.1-A. All of the evacuees were saved, but two crew members of the L-47 were swept away. Capt. Potty subsequently received a DFC for his achievement in this rescue and the surviving members of the crew were awarded Air Medals. This reef lay approximately 295 statute miles west of Espéritu Santo.


69. Ibid.

70. CH-III-3980 (6 Feb. 43), CG SOS SPA to CG AAF, 3394, 7 Feb. 43. An earlier request for automatic pilots made to Hamilton Field on 27 January had failed to bring any action. This time General Stratemeyer demanded that immediate attention be given to these requests. Extract from cable log of Gen. Stratemeyer, 8 Feb. 1943, in memo for Air Service Command, A-4, by Col. Shearer, Cable Secty., 8 Feb. 1943, cable msg., New Caledonia, Feb. 1943, in AFHI files.

Itr., Gen. Harmon to Gen. Arnold, 2 Nov. 1942. This "Aviatorium" was organized in conjunction with the American Red Cross in Auckland. Much of the credit for its establishment goes to Col. Earl Maxwell, M.C., Surgeon, USAF,PA. Air crews were granted 7-day rests here, although they were not compelled to remain at the "Aviatorium" while in Auckland. Because of its facilities and inexpensiveness, most of them did. Freese Report.


Ibid.


CI-OUT-7269 (23 Dec. 42), Arnold to Harmon, #Cane 2509, 22 Dec. 43; CI-OUT-3777 (6 Jan. 43), George to Harmon, #Cane 2751, 8 Jan. 46.

CI-OUT-12548 (29 Nov. 42), Harmon to AGWAR, #1542, 29 Nov. 42; CI-OUT-1045 (3 Dec. 42), AGWAR to CG USAF New Caledonia, #2347, 3 Dec. 42. Personnel of this unit consisted of 1 MAC officer, 5 NJ officers, 25 nurses, and 81 enlisted men.

CI-OUT-8785 (29 Dec. 42), CG-SCPA to AGWAR, unnumbered, 19 Dec. 42; CI-OUT-2283 (24 Dec. 42), AGWAR to CG Nacal, #Cane 2530, 24 Dec. 42.


85. Ibid.

86. Ibid.; Freise Report. The time required by the evacuation flights was as follows:
- Guadalcanal to Espiritu Santo: 4-4½ hours
- Guadalcanal to Efate: 5-6 hours
- Guadalcanal to New Caledonia: 7-8 hours


88. Ibid. Medical officers often cite the beneficial morale effect of the nurses upon wounded personnel being evacuated.

89. Interview with Gen. Vandegrift, 3 Feb. 1943. General Vandegrift states that at one time as many as 19 C-47's were arriving and leaving Henderson Field in 1 day. Several of the pilots of the 15th Troop Carrier Squadron were staff sergeants, nine of whom were commissioned second lieutenants in the field on 20 February 1943. Adj.-Lt.-11 (1 March 43), GG SOPAC to AGWAR, #5284, 28 Feb. 43.

2. Incl. #1 (ltr., Gen. Harmon to Gen. Arnold, 6 June 1944), "The Army in the South Pacific," Lt. Gen. H. F. Harmon. This is a brief narrative history of the development and organization of Army forces in the South Pacific, written by OGHE-SOPAC prior to his departure from the South Pacific. SOS was constituted by AG 320.2 (2-6-43) 03-I-SPOF-U-M on 11 February 1943, and activated 1 March. See record card of Eq. and Eq. Sq. SOS, SPA, in Unit Records Branch, OCMR.


4. CM-III-6319 (17 Aug. 42), OGHE-SOPAC to Arnold, #267, 17 Aug. 42; CM-OUT-5569 (21 Aug. 42), UG AAF to Necal, #1048, 30 Aug. 42.


6. CM-OUT-5507 (16 Dec. 42), AFADS to CG HD, #1892, 16 Dec. 42; CM-OUT-1803 (6 Feb. 43), Transportation Corps (Somervell) to CG HD, #2681, 5 Feb. 43.


10. Ibid.


12. Interview with Maj. Van Slyck, 26 March 1943.

13. History of the 67th Fighter Squadron, Activation to 31 Dec. 1943; Brooks and Kraft Report #5, 15 Feb. 1943; CM-III-5552 (9 Nov. 42), Harmon to Arnold, #1151, 8 Nov. 42.
14. CK-IN-3552 (8 Nov. 42), Harmon to Arnold, #1151, 8 Nov. 42.


17. BFR, AFDAS to AFDAS, 17 July 1942, in Air AG 370.5, Sec. II; BFR, AMFP to AFDAS, AFAC, AFADS, 12 Aug. 1943, in 321.9-3, 13, Groups.


19. CK-OUT-664 (3 Nov. 42), AFASC to Boston, #16, 2 Nov. 42.


23. Ibid.

24. CK-OUT-02591 (8 Oct. 42), AFADS to CG Recal, #1639, 8 Oct. 42;

25. Ibid.

26. CK-IN-4065 (11 Aug. 42), Harmon to Arnold, #763, 11 Aug. 42.


29. CK-OUT-06923 (27 Oct. 42), CDF to CNGE/SOPAC, #1644, 26 Oct. 42;
CK-OUT-04579 (14 Oct. 42), CDF to 03 Hawaiian Dept., #691, 14 Oct. 42.

31. Ibid.

32. CI-OUT-08747 (25 Oct. 43), AFHFS to Harmon, #1887, 26 Oct. 43.

33. CI-IN-10011 (23 Nov. 42), Harmon to Arnold, #1442, 23 Nov. 42.

34. R&R, AFHFS to AFEMR, 27 Dec. 1943, in AAG 312.1-A; CI-IN-2395 (6 Jan. 43), Harmon to Marshall, #841, 4 Jan. 43.

35. CI-IN-2396 (6 Jan. 43), Harmon to Marshall, #841, 4 Jan. 43.

36. CI-OUT-3163 (9 Jan. 43), Marshall to Harmon, #1075, 9 Jan. 43.


38. History of the 33rd Service Group, 15 Jan. 1941-31 March 1943; Operational History of 33rd Service Group. Total strength of assigned units on 8 December was 63 officers, 1,087 men; 4 additional officers and 35 men were attached. The shop was functioning as early as 11 December.


44. Incl. #12, (History of the 13th Air Depot Group, Activation to 30 June 1943), "Information concerning Depot Supply, 13th Air Depot, AAF, 7 July 1943; History of the 13th Depot Supply Squadron, Activation to 31 Dec. 1943.
45. The supply squadron had available five C-100-type buildings and four 60' x 80'-foot steel buildings. Brooks and Kraft Report, 5, 13 Feb. 1943.

46. Incl. 413 (History of the 13th Air Depot Group, Activation to 20 June 1943); "Information concerning Thirteenth Depot Engineering Department," 2 July 1943.

47. CH-IN-4062 (9 Feb. 43), CG SOS SPA to CG ASCFPO, 2805, 7 Feb. 43.


50. Ibid.

51. Ibid.

52. CH-IN-6346 (21 Jan. 43), CONCESSIONS SPA to CG ASC FPO, 22049, 20 Jan. 43; Brooks and Kraft Report, 5, 13 Feb. 1943. This plan originally was to employ Headquarters Flight Section and New Zealand Air Force personnel, facilities, and equipment.

53. Interview with 1st Lt. Jonathan Foriss, 13 June 1943. Lieutenant Foriss reached Hilo on 2 August 1943 with the 483rd Ordnance Company and subsequently was assigned to the 42d Bombardment Squadron (H) as ordnance officer.


56. Incl. 413 (History of the 13th Air Depot Group, Activation to 20 June 1943), "Information concerning Thirteenth Depot Engineering Department," 2 July 1943.


58. CH-IN-1053 (23 Jan. 43), Harmon to CG ASP, 2302, 21 Jan. 43.

59. General Berneen asked for one representative each from the following companies: Boeing, Consolidated, North American, North American, Curtiss-Wright, Pratt and Whitney, Packard, Hamilton, and Aerovox.

CH-IN-3434 (28 Feb. 43), CG SOS SPA to CG ASC PFO, 2805, 27 Feb. 43.
60. CI-IN-6010 (19 Nov. 42), Harmon to AFTSG, #157, 19 Nov. 42; CI-OUT-2965 (20 Nov. 42), AFTSG to Harmon, #2108, 19 Nov. 42.

61. CI-IN-565 (2 Feb. 43), Burnett to Marshall, #3019, 1 Feb. 43; CI-IN-3130 (6 Feb. 43), Harmon to AFTSG, #6549, 6 Feb. 43; CI-OUT-2965 (9 Feb. 43), AFTSG to CG SPA, #Rene 3183, 9 Feb. 43.

62. CI-IN-7034 (16 Jan. 43), Harmon to AFTSG, #1796, 14 Jan. 43; CI-OUT-3111 (16 Jan. 43), AFTSG to Harmon, #Rene 2976, 16 Jan. 43.

63. CI-IN-127737 (27 Jan. 43), Harmon to AFTSG, #7270, 26 Jan. 43; CI-OUT-1776 (5 Feb. 43), AFTSG to Harmon, #Rene 3140, 4 Feb. 43.


65. History of the 67th Fighter Squadron, Activation to 31 December 1943.


68. CI-IN-5991 (14 Sep. 42), Harmon to Arnold, #281, 14 Sep. 42; CI-OUT-5134 (15 Sep. 42), Marshall to Harmon, #1371, 15 Sep. 42.


70. CI-OUT-3455 (10 Sep. 42), AFTSG to CG HD, #55, 10 Sep. 42.

71. CI-IN-12313 (28 Sep. 42), Harmon to CG SOS, #3234, 28 Sep. 42.

72. CI-OUT-4337 (15 Nov. 42), AFAFP to Harmon, #2032, 11 Nov. 42.

73. Directive for CG AS by AFAFP, "Air Depot in the South Pacific," 14 Sep. 1942, in AAG CCO-800, Misc., East Indies. A signal section of 2 officers and 25 enlisted men was to be added to the running table. Ibid.


77. Ibid.

78. CI-INV-6270 (12 Feb. 43), Ostrom to WD ODP, #123, 11 Feb. 43;
CI-OUT-5126 (15 Feb. 43), AFAFP to CG Bora Bora, #159, 15 Feb. 43.
Base commander was Maj. Gen. Charles D. T. Ostrom.

2. The strip under construction at Aola Bay had been abandoned after it was extended to 1,200 feet. Swamp land at one end prevented its development. Special A-2 Report to CG VII Fighter Command, by Capt. Charles W. Hedger, 2 Dec. 1942, in Combat and Mission Reports, 44th Fighter Group, 44th Fighter Squadron, in ANFHI files.


5. Narrative of Operations, Americal Division at Guadalcanal, 28 May 1943, in AGO Combat Analysis sub-section, 30 Amer. 11.4; Merillat, The Island, 232.


9. Northampton was sunk, New Orleans and Minneapolis heavily damaged, and Pensacola only slightly less damaged. "Battle of Tassafaronga," O.I Combat Narratives, 20-21. The Joy approached Guadalcanal with several large transports, 2 of which were sunk, in addition to the loss of a cargo vessel, 4 DD's, and 2 cruisers or DD's. Merillat, The Island, 232.

11. Ibid.

12. Ibid.

13. Narrative of Operations, American Division at Guadalcanal, 23 May 1943, in AGO Combat Analysis sub-section, 30 Amer. 11.4.

14. See chart following p. 152. This OIA unit was the 124th Japanese Infantry Regiment, under Colonel Oga. Report on Activities in South Pacific Area, 27 Jan. 1943; Narrative of Operations, American Division at Guadalcanal, 23 May 1943.


16. All the 67th’s pilots had been sent back to New Caledonia by 22 December. They did not re-enter combat on Guadalcanal until 29 January. History of the 67th Fighter Squadron.

17. History of the 68th Fighter Squadron, Activation to 31 December 1942.


19. This attack was delivered by the 28th Division, with the 3d Battalion of the 182d Infantry, the Reconnaissance Squadron of the American Division, and the 1st Battalion, 3d Marines. “Report on Activities in South Pacific Area,” Maj. Frank O. Brown; CI-I-5493 (12 Jan. 43), Harman to Marshall, #1531, 11 Jan. 43; War Diary, NA-2, 10 Jan. 1943.

20. CI-I-5493 (12 Jan. 43), Harman to Marshall, #1531, 13 Jan. 45.


27. The barges were made of gas drums normally driven by outboard motors, but one was aptly named the "Fucha-Maru." Lidd.; Report on Activities in South Pacific Area, Maj. Brown.


30. Ibid.

31. FO #2, Hq. IV Corps, in G-3 Journal, Americal Division, 25 Jan. 1943, in AGO Combat Analysis sub-section, 50 Amer. 33.1.


33. Narrative of Operations, Americal Division, 23 May 1943; C:II-4245 (1 Feb. 43), Harmon to Marshall, 3253, 1 Feb. 43; C:II-4245 (10 Feb. 43), Harmon to Marshall, 3861, 9 Feb. 43.


40. Hq. 1st Marine Division, Daily Intelligence Summaries, 7 Nov.-7 Dec. 1942; C:II-4933 (10 Dec. 42), Harmon to Marshall, 4770, 8 Dec. 42.
41. History of the 11th Bombardment Group (H). During December, B-17 operations against enemy air installations were as follows:

<table>
<thead>
<tr>
<th>Target</th>
<th>No. of missions</th>
<th>Bombs dropped</th>
<th>Aver. alt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lunda</td>
<td>21</td>
<td>1274 x 100; 2</td>
<td>10,176</td>
</tr>
<tr>
<td></td>
<td></td>
<td>126 x 600; 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>16 x 1000; 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 demol. clusters</td>
<td></td>
</tr>
<tr>
<td>Kahihi Field and adjacent installations</td>
<td>10</td>
<td>113 x 100; 2</td>
<td>8,400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16 x 600; 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>37 x Incend.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 x Demol.</td>
<td></td>
</tr>
<tr>
<td>Bulu Field</td>
<td>3</td>
<td>40 x 100; 2</td>
<td>7,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 x Demol.</td>
<td></td>
</tr>
<tr>
<td>Kekata</td>
<td>1</td>
<td>20 x Demol.</td>
<td>6,000</td>
</tr>
<tr>
<td>Shortland-Jallale-Faidi area</td>
<td>1</td>
<td>20 x Demol.</td>
<td>6,500</td>
</tr>
<tr>
<td>Rabaul Waerfs</td>
<td>1</td>
<td>8 x 500; 2</td>
<td></td>
</tr>
<tr>
<td>Vunakanau</td>
<td></td>
<td>8 x 500; 2</td>
<td></td>
</tr>
<tr>
<td>Lasmadi</td>
<td></td>
<td>8 x 500; 2</td>
<td></td>
</tr>
</tbody>
</table>

Periodic Intelligence Report by S-2 of Joint Hq. 5th and 11th Bombardment Groups (H), 1-31 Dec. 1942.


43. History of the 98th Bombardment Squadron (H).


46. C.I.-11611 (27 Dec. 42), Harmon to Marshall, 4-135, 25 Dec. 42. Pilots of these two were Maj. Walter Y. Lucas in "Typhoon Macon" and Capt. W. H. Crane in "Googie," both of the 98th Squadron. History of the 98th Bombardment Squadron (H). This strike was under the operational control of the senior naval aviator on Guadalcanal. G-3 Journal File, Americal Division, 17-24 Dec. 1942. Lucas was subsequently lost in a B-29 mission over Tokyo.

Those planes left on 23 December. 6-3 Journal File, Americal Division, 24-30 Dec. 1942. This plan to send the bombers to Forestry was initiated by Admiral Fitch’s staff.

48. Periodic Intelligence Report, Joint Hq. 5th and 11th Bombardment Groups (H), 1-31 Dec. 1942.

49. Intelligence Summary, Joint Hq. 5th and 11th Bombardment Groups (H).


51. 6-3 Journal File, Americal Division, 24-30 Dec. 1942. Admiral Halsey’s congratulations to the "Hound Hunters" were as follows: "Please shake the hand of each one of the Hound Hunters for me. That do you feed those boys and can you send us a couple of bags of it."

52. 6-3 Journal File, Americal Division, 17-24 Dec. 1942.

Lynch was on Guadalcanal from 1 December 1942 to 31 January 1943 as a member of the 339th Fighter Squadron. 6-3 Journal File, Americal Division, 17-24 Dec. 1942; Special A-2 Report to CG VII Fighter Command, by Capt. Charles J. Hedges, 23 Jan. 1943, in Combat and Mission Reports, 18th Fighter Group, 44th Fighter Squadron, in AFHRS files.


56. Ibid. In early February there were 19 P-70's in Hawaii. The Army's mobile B-17 unit (SOR-52?) would not be ready until May 1943, according to February estimates. Ibid.

57. History of Detachment "D" Night Fighter Squadron, 16 Feb.-30 Sep. 1943. The last pilot was 1st Lt. John L. Kover, with Sgt. George D. Prouty as his crew.


62. Ibid.


65. AAF planes available on 3 January were: 7 P-39's, 12 P-40's, 1 P-40C, 2 2-17's, 5 P-40K's, 2 B-25's, 9 B-26's, 6-3 Journal File, Americal Division, 30 Dec. 1942-6 Jan. 1943; Naval Communication in G-3 Journal, Americal Division, 30 Dec. 1942-6 Jan. 1943. P-39's had hit Guadalcanal on 18 November, but thereafter almost their entire effort was confined to the Central Solomons.

66. Ltr., Gen. Harmon to Gen. Arnold, 16 Dec. 1942, in AAF 312.1-A. These were 3-26's of the 69th Bombardment Squadron (E). Arriving on Guadalcanal early on the afternoon of 31 December, the squadron was sent up to Lunga within 3 hours after landing. History of the 69th Bombardment Squadron (E) from Jan. 1943-1 July 1943.


69. G-2 Periodic Report 21 and 2, Hq. USASISPA, 17-24 Jan. 1943, and 24-31 Jan. 1943, in A-2 Lib., USASISPA Intelligence Summaries; CI-11-10871 (24 Jan. 43), Harmon to Marshall, #2640, 23 Jan. 43. Estimated enemy air strength by the end of January was as follows:

<table>
<thead>
<tr>
<th></th>
<th>VF</th>
<th>VB</th>
<th>FB</th>
<th>FF</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bougainville-</td>
<td>10</td>
<td>30</td>
<td>6</td>
<td>24</td>
<td>4</td>
<td>74</td>
</tr>
<tr>
<td>Buin-Faisi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Georgia</td>
<td>14</td>
<td>8</td>
<td>6</td>
<td>24</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>38</td>
<td>6</td>
<td>24</td>
<td>4</td>
<td>96</td>
</tr>
</tbody>
</table>

70. G-2 Periodic Report 21, 17-24 Jan. 1943. Apparently the Jap was well informed as to movements of personnel; on this night Halsey and staff members were visiting Espiritu. Then the party flew to Guadalcanal the next day, Henderson received its heaviest night attacks in weeks. Ibid.

72. Ibid. One squadron (72d) of the 5th Group had been in combat since September. Lack of a definite number of combat missions for flying personnel was regarded by flight surgeons as having a very serious effect upon morale. Freese Report.


76. CL-002-7252 (21 Dec. 42), AFRED to Harmon, #23483, 20 Dec. 42; CL-IN-2370 (7 Jan. 43), Harmon to Arnold, #1317, 7 Jan. 43. In a subsequent report, Colonel Freese, Air Force Surgeon, stated: "It is considered opinion of the undersigned that the short-sighted policy of repeatedly allowing requests for replacements and constantly falling to fulfill commitments to this theater has cost the combat flying careers of the major portion of the 11th Bombardment Group (n)." Freese Report.


79. Ibid.

80. Ibid.

81. Ibid.: CL-IN-2388 (6 Feb. 43), Enmons to WD CSA, #227, 6 Feb. 43; CL-IN-2388 (8 Feb. 43), Enmons to WD and CG CS/AO, #361, 7 Feb. 43; CL-IN-4260 (9 Feb. 43), Enmons to WD CSA, #364, 6 Feb. 43; CL-IN-5512 (11 Feb. 43), Enmons to WD CSA, #1028, 10 Feb. 43. The first units of the 434th Squadron reached Espiritu on 8 February, those of the 370th on 12 February, while the Headquarters Squadron of the 307th came in on the 16th. History of the 434th Bombardment Squadron (H), Activation to 31 Dec. 1943; Freese Report.

82. History of the 11th Bombardment Group (n). The Group sailed on 29 March with 43 officers, 6 warrant officers, and 1,034 enlisted men. Of these, 3 officers and approximately 600 enlisted men
eventually returned from furlough and elected to remain with the group. The remainder, having applied for reassignment, returned to the States. History of the 11th Bombardment Group (H).

83. Incl. 3 (History of the 98th Bombardment Squadron (A)), JNO 44, 22 Jan. 1943. Because of the joint operations with the 9th Group, it is impossible to determine accurately the damage done to the enemy by the 11th Group. The combined score of enemy aircraft destroyed and damaged is as follows: August, 22-15; September, 29-13; October, 31-22; November, 23-7; December, 11-3; January, 3-4; February 10, number damaged not reported.

CPL-18-13833 (26 Feb. 43), Harmon to AAF, F-1067, 25 Feb. 43. See Appendix 3 for score vs. shipping.


<table>
<thead>
<tr>
<th>Units</th>
<th>1 Jan. 1943</th>
<th>1 April 1943</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 H/B Csa.</td>
<td>57</td>
<td>72</td>
</tr>
<tr>
<td>1 H/B Csa.</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>2 Ftr. Csa.</td>
<td>150</td>
<td>100</td>
</tr>
</tbody>
</table>

* One additional squadron of fighters at Tongatibu to be manned by Ersatz, Ibid. As the result of a JCS agreement with the Navy on 10 November, aircraft in the category of "Depot and Ready Reserve" were eliminated.


88. The lag in shipment is illustrated by the following table:

<table>
<thead>
<tr>
<th>Type</th>
<th>Committed by JCS</th>
<th>In Theater, 30 Dec.</th>
<th>For complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>H/B</td>
<td>70</td>
<td>47</td>
<td>61.5</td>
</tr>
<tr>
<td>H/S</td>
<td>52</td>
<td>26</td>
<td>42.4</td>
</tr>
<tr>
<td>Fighters</td>
<td>150</td>
<td>168</td>
<td>105</td>
</tr>
</tbody>
</table>

Ibid.
87. Ibid.


92. The complete estimate appears in the following table (as of 29 Dec.):

<table>
<thead>
<tr>
<th></th>
<th>E/B</th>
<th>N/P</th>
<th>L &amp; D/B</th>
<th>TF</th>
<th>Photo</th>
<th>Ousn.</th>
<th>Trans.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPTAC</td>
<td>120</td>
<td>92</td>
<td>35</td>
<td>351</td>
<td>11</td>
<td>9</td>
<td>53</td>
<td>672</td>
</tr>
<tr>
<td>SOPAC</td>
<td>48</td>
<td>28</td>
<td>35</td>
<td>282</td>
<td>8</td>
<td>8</td>
<td>18</td>
<td>287</td>
</tr>
<tr>
<td></td>
<td>168</td>
<td>119</td>
<td>35</td>
<td>633</td>
<td>19</td>
<td>14</td>
<td>71</td>
<td>959</td>
</tr>
</tbody>
</table>

Estimated preponderance was: bombardment, 5 to 3; fighter, 2 to 1; others, 5 to 1. Ibid.

93. Ibid. The figures covered the period 1 Feb. 1942 to 27 Dec. 1942:

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>USAF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombardment</td>
<td>46</td>
<td>30</td>
</tr>
<tr>
<td>Fighters</td>
<td>304</td>
<td>67</td>
</tr>
<tr>
<td>Others</td>
<td>28</td>
<td>23</td>
</tr>
</tbody>
</table>


96. Hist. of the 6th Bombardment Squadron (H), Jan. 1942-1 July 1943, G1-02-0752 (21 Feb. 43), Marshall to Harmon, 26 Dec. 1943, 20 Feb. 43; Comment #2 (ExR, Air AG to AG/1S, A-3, 20 Feb. 1943), A3/AS, A-3 to Air AG, 20 Feb. 1943, in New Caledonia cable messages, 20 Feb. 1943; Ltr., AG to G6 SFAA and SOFAA, 20 Feb. 1943, AG 320.3 (2-34-43) G3-I-AEFU-I, in AG 312.15, AGO Letters. As of 20 February the status of medium bombers for the South Pacific was: 6 B-25's left Hawaii on 18 February, 1 was at Hickam and 1 was on route to Hickam on 19 February; 3 were at Hamilton on the 20th, 16 more were at Sacramento scheduled to clear for Hamilton by 25 February. Two more were on route to
Hamilton, estimated to depart by the end of the month, and 16 additional ones were earmarked for delivery in March. The flight echelon of the 75th Squadron was ordered to Sacramento to fly out 10 B-35's under ADG control. CI-OUT-7752 (31 Feb. 43), Marshall to Harmon, 23393, 20 Feb. 43.

97. The 105 officers and 558 enlisted men of these units embarked on 16 April 1943. History of the 42d Bombardment Group (1); History of the 320th Bombardment Squadron (1), March–June 1943.


99. CI-OUT-5839 (15 Jan. 43), Stratmeyer to Harmon, 23391, 16 Jan. 43; CI-OUT-2471 (10 Jan. 43), ADG to Harmon, 23391, 9 Jan. 43; CI-OUT-2383 (13 Jan. 43), ADG to Harmon, 23393, 12 Jan. 43. General Harmon already had 7 B-35's in November but lacked crews for them; also, they could not be sent for some time. CI-III-6764 (21 Nov. 42), 30 i Island Air Command to ADG, 5211, 20 Nov. 42; CI-OUT-6135 (13 Dec. 42), ADG to 80 USAF, 17 Dec. 42; CI-OUT-7008 (22 Dec. 42), ADG to 80 USAF, 21 Dec. 42.

100. CI-OUT-2730 (8 Jan. 43), Arnold to Harmon, 23395, 8 Jan. 43.

101. CI-III-3663 (19 Jan. 43), Harmon to Arnold, 51163, 19 Jan. 43; CI-OUT-6933 (20 Jan. 43), ADG to Harmon, 23391, 20 Jan. 43; CI-OUT-6951 (28 Jan. 43), ADG to 80 USAF, 28 Jan. 43.


103. CI-OUT-2131 (10 Feb. 43), ADG to Harmon, sgd. Stratmeyer, 23391, 8 Feb. 43.


105. CI-III-7645 (16 Feb. 43), Harmon to Arnold, 51163, 16 Feb. 43.

106. CI-OUT-6135 (16 Feb. 43), Marshall to Harmon, 23393, 16 Feb. 43. Earliest departure date of the March production units was 20 March.

107. CI-III-10407 (23 Jan. 43), Harmon to Arnold, 52409, 23 Jan. 43; CI-OUT-6259 (25 Jan. 43), ADG to Harmon, 23391, 24 Jan. 43. The 89th Squadron (1) had first begun practice in low altitude nosehead bombing on 25 November 1942. It was on this
day that the unit received a plan to drop magnetic mines in Shortland Harbor on a non-stop return trip, apparently from Cactus. In the words of the squadron's personnel, "Fortunately nothing ever came of it." History of the 69th Bombardment Squadron (H), January 1942-1 July 1943.

108. CI-OUR-2474 (13 Feb. 43), AFREF to CG SPA, Et. mag., #Rame 3364, 13 Feb. 43; CI-II-12390 (35 Feb. 43), Harson to Stratemeyer, #5090, 26 Feb. 43.

109. CI-II-7637 (15 Feb. 43), Harson to Stratemeyer, #4423, 15 Feb. 43.

110. History of the 69th Bombardment Squadron (H), January 1942-1 July 1943.

111. Ibid. Similar conditions were reported by other units. Interview with Lt. Col. Harold Whitcher, by author, 20 June 1944. Colonel Whitcher commanded the 73d Bombardment Squadron (H) of the 5th Group. Malamai was a more serious opponent than the Jap. By March 1943, 72 flying days per 100 officers were lost because of this disease. "Report of Inspection of the Medical Activities of the Thirteenth Air Force," Col. George F. Baker, III, MC, n.d., in AAG, Iul.; files, Air Surgeon material. See Appendix 4 for chart of flying days lost by air personnel.

112. Ibid.; History of the 67th Fighter Squadron.


116. Ibid.; ltr., Gen. Stratemeyer to Gen. Harson, 6 Feb. 1943, in Air AG 320.2, South Pacific. Replacement for ground echelons were to be at a monthly rate of 1.5 per cent of the T/O. Ibid.
1. CM-IN-4918 (10 Feb. 43), Erman to Marshall, #6922, 10 Feb. 43; G-3 Journal, America I Division, 6–14 Feb. 1943; Narrative of Operations, America I Division at Guadalcanal, 23 May 1943; in AGO Combat Analysis sub-section, 30 Amer. 11.4; Operations of the 25th Infantry Division on Guadalcanal, 17 Dec. 1942–5 Feb. 1943, n.d., ibid., 325–11.5. America I reports indicate that the meeting occurred at 1600; the 25th Division states 1400.


3. Ibid., 47–50.


5. Ibid. This field was built by the 33d Seabee Battalion, assisted by specialized personnel of the 118th Engineer Battalion. Prior to this invasion, natives had reported the complete evacuation of some 500 Japanese troops from the islands. G-2 Periodic Report #5, HQ, USAFIPAC, 13–20 Feb. 1943, in A-2 Lib., Fifth Air Force Intelligence Summary.

6. Ibid.


8. Ibid. See Appendix No. 5 for range of enemy medium bombers.

9. By 20 February at least 75 fighters were at Kahihi and Bellale to protect the shipping in the Shortland area. G-2 Periodic Report #5, HQ, USAFIPAC, 15–20 Feb. 1943. General Harmon reported 82 fighters on Kahihi, Kahihi, Bellale, and Munda as of 21 February. CM-IN-19614 (20 Feb. 43), Harmon to Marshall #4883, 24 Feb. 43. See Appendix 6 for estimate of enemy air strength in the Solomons area.

10. War Diary, WIL-2, 12 Feb. 1943.

11. History of the 424th Bombardment Squadron (H), Activation to 30 June 1943. This squadron of the 307th Group was based at Espiritu Santo, having left Gau on 6 February. Apparently the other three were from the 370th Bombardment Squadron (H).


14. History of the 339th Fighter Squadron (C2). Four gunners of this last B-24 parachuted out when the wing caught fire. The remaining crew members made the landing and 3 weeks later five survivors including the pilot reached Guadalcanal. They had moved down the north coast of Choiseul by rubber boat, then crossed to Santa Isabel, where friendly natives notified the coast watcher. Ibid. Supplement to Annex 6, Periodic Report V5, Eq. USAFISPA, 20 Feb. 1943, in A-2 Lib., Fifth Air Force Intelligence Summaries.

15. Ibid.


17. Ibid. War Diary, NA-2, 14 Feb. 1943; History of the 339th Fighter Squadron (C2). One of the P-38 pilots, Lt. John R. Malve, was rescued the following day.


20. Twenty-two planes were combat losses, 3 operational; 11 of the rescued pilots were AAF, 5 Navy, 3 U.S.N. Incl. (War Diary, NA-12), "Record of Events, Fighter Command, Guadalcanal, February 1, 1943 to July 25, 1943." See Appendix 7 for breakdown of losses.


23. Incl. (War Diary, NAG-13), "Record of Events, Fighter Command, Guadalcanal, February 1, 1943 to July 25, 1943." In February the daily average of fighter aircraft in commission was 108; of pilots, 105. These figures include all services and types. Ibid. See Appendix 8 for availability of fighter planes on Guadalcanal, Feb. 1943.

24. War Diary, NAG-2, 15 Feb. 1943.

25. At the time of activation of COMAIRSOL, composition of the air command was as follows:
   AAF; 13th, 44th, 67th, 60th, and 338th Fighter Squadrions (detachments); 5th and 11th Bombardment Groups (H) (detachments); 69th Bombardment Squadron; detachments of 307th Bomb Group (H), 17th Photo Rec. Squadron.
   RCAF: 21st Fighter Wing, Headquarters Squadron-14; 224th Bombardment Wing, Headquarters Squadron-14; TAFS-252, 302-144, 248-254, TAF-133, VS 4D-14, VOS Reconnaissance 3 (K-125); V2-72, Patrón 13 and 61, V2E-11, 13, and 16. War Diary, NAG-2, 17 Feb. 1943.


27. Interview with Maj. J. D. H. Hattig; by author, 15 May 1944, in AFI1I. Major Hattig was 2-2 of the 18th Fighter Group on Guadalcanal.

28. Ibid.

29. "History of the United Aircraft Ammunition Supply System," by Lt. Col. J. E. F. Lindsey, 23 May 1944, in AFI1I files. Colonel Lindsey was ordnance officer for the initial echelon of the service command activated to supply Guadalcanal and future advanced bases. On 1 July 1943 he became ordnance officer of the Thirteenth Air Force. His excellent report is the story of a unique development in inter-service cooperation.

30. Ibid. Colonel Lindsey received a weekly status report from the combined jum, and a weekly expenditure report from AAF, Navy, and Marine. When certain items were needed, each service would order a proportionate share regardless of whose planes had expended the ammunition.


32. History of the 11th Bombardment Group (H), Exhibit IV. Losses for February included 4 aircraft, 14 officers, and 23 enlisted men.
33. Ibid.


37. Ibid.


Because the Thirteenth Air Force was not activated until January 1943, the records of the AAF in the South Pacific in 1942 are widely dispersed. Such operational records as were preserved were sent back to Headquarters, Seventh Air Force, and to Headquarters, AAF, where they were filed with those of the Fifth or Seventh Air Forces, or with both. Because the distinction between the South and Southwest Pacific Areas was not always clear to personnel engaged in the filing operation, much of the early record has been placed with that of the Fifth Air Force. Since all AAF operations in the Guadalcanal campaign were under naval control, certain records of the period remain in Navy hands and have not yet been made available at AAF Headquarters. Most useful in this respect would be the correspondence between COMAIRSOPAC and the various AAF air commanders, and a complete file of the COMAIRSOPAC Daily Intelligence Summary. In the current study the footnotes will indicate the location of the documents—memos, interviews, cable messages, correspondence, and other papers which were used. The various repositories are cited according to the following arrangement.

AAF, Management Control, Mail and Records Branch, Classified Records Section: cited as AAG with decimals.

The Adjutant General, Classified Files: cited as AGO with decimals.

Operations Branch, Combat Analysis Files: cited as Combat Analysis Subsection. Materials in this office contain divisional operations and intelligence reports, and miscellaneous papers relating to the combat activities of the various ground units of the Army, including some records from the Marine Corps.
Secretary of Air Staff, Classified Files: cited as Air AG with decimals.

AAF Message Center: Cable and radio messages used in this study are in either the AAF Message Center or the files of the Historical Division, AG/AS, Intelligence. No effort was made to distinguish between the two repositories and neither is cited, although the great majority of the cables used are in the Historical Division. A small number of messages were found in other collections and these are appropriately indicated.

Assistant Chief of Air Staff, Operations, Commitments, and Requirements, Unit Records Branch, Thirteenth Air Force Files.

Assistant Chief of Air Staff, Intelligence.
Historical Division (AFHPI files): Basic unit histories in this collection are cited by title only, whereas those monthly or quarterly histories submitted subsequent to the basic history are indicated with their appropriate dates. Miscellaneous memos, letters, and planning papers concerning the South Pacific are filed in the Thirteenth Air Force section of AFHPI.

Collection Division, Reception Branch (Intelligence Library: cited as A-2 Lib.). In the A-2 Library many of the early reports from the South Pacific are to be found in the records of the Fifth and Seventh Air Forces, and with those of the British Empire, Solomon Islands. All interviews not otherwise indicated are found in the A-2 Library.

Assistant Chief of Air Staff, Plans.
Office Services Division: This office employs its own filing system and documents found here are indicated according to the method currently used. Most useful for this study were the papers in II-2, Evaluation of Intelligence; WP-IV-E-23, South Pacific; and WP-IV-E-7, New Caledonia.

U. S. Marine Corps, Historical Division Files.
Through the courtesy of the Chief, Historical Division, USMC, operational records of the Marine Corps were made available for preparation of this study. Since AAF fighter units on Guadalcanal operated directly under Marine control, the War Diaries and Intelligence Journals of the Marine aircraft wings, groups, and squadrons furnish the most complete and accurate source for fighter and light bomber operations on Guadalcanal during the early period of the campaign.

Office of Naval Intelligence, Publications Branch, Combat Narratives. In the series of studies on naval operations in the South and Southwest Pacific, the Navy's combat narratives were useful. However, they must be treated as "first narratives" rather than
as finished and completely accurate histories. They are more reliable for their accounts of ship actions than for statistics relating to air or ground operations. The following in the series devoted to the Solomons Campaign were used in preparing this study: "Battle of Cape Esperance, 11 October 1942"; "Battle of Santa Cruz Islands, 26 October 1942"; "Battle of Guadalcanal, 11-15 November 1942."

Printed Books:
Foster Hailey, Pacific Battle Line, New York, 1944.
Ira Wolfert, Battle for the Solomons, New York, 1943.

The volumes were useful in providing general descriptive material for the activity in the Solomons. Both Wolfert and Hailey were present on Guadalcanal and observed much of what they describe. Pending publication of an official history of the First Marine Division on Guadalcanal, Morillat's The Island must serve as a reasonably accurate, though by no means complete, account of this early Marine campaign. Its author evidently had access to some of the War Diaries and divisional reports of the First Division. Less exact and more flamboyant is Rule's lively tale of the Seabees, which again is only an inadequate substitute for a genuine history of the naval construction battalions, whose activities have been intimately related to AAF operations in the Pacific. At the present time, nothing beyond this public relations volume has appeared.
I. Results of Action Against Enemy Aircraft

<table>
<thead>
<tr>
<th>Type</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Contacted</th>
<th>Destroyed</th>
<th>Damaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø</td>
<td>8</td>
<td>56</td>
<td>69</td>
<td>90</td>
<td>203</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Destroyed</td>
<td>5</td>
<td>13</td>
<td>18</td>
<td>25</td>
<td>-</td>
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<td>1</td>
<td>4</td>
<td>12</td>
<td>5</td>
<td>-</td>
<td>-22</td>
<td></td>
</tr>
<tr>
<td>F/P</td>
<td>33</td>
<td>69</td>
<td>43</td>
<td>55</td>
<td>205</td>
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<td>-</td>
</tr>
<tr>
<td>Destroyed</td>
<td>11</td>
<td>11</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>26</td>
<td>-</td>
</tr>
<tr>
<td>Damaged</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-10</td>
<td></td>
</tr>
<tr>
<td>F/FP</td>
<td>6</td>
<td>59</td>
<td>40</td>
<td>25</td>
<td>130</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
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<td>2</td>
<td>14</td>
<td>3</td>
<td>2</td>
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<td>21</td>
<td>-</td>
</tr>
<tr>
<td>Damaged</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>11</td>
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</tr>
<tr>
<td>S-43</td>
<td>14</td>
<td>7</td>
<td>15</td>
<td>6</td>
<td>42</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Destroyed</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>9</td>
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<td>4</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>8</td>
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<tr>
<td>Me-109 Type</td>
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<td>-</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Baka 93</td>
<td>-</td>
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<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>S-51</td>
<td>-</td>
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<td>6</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>S-5</td>
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<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unknown (by bombing)</td>
<td>-</td>
<td>-</td>
<td>18</td>
<td>-</td>
<td>18</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

| Total Aircraft | 610 | 124 | 57 |

Total destroyed and damaged, all types--181.

Explanation of symbols:
ø Zero fighter, land- or carrier-based and new-type fighter
F/P Zero float plane fighter, single-float monoplane
F/FP Float biplane, single float (fighters and reconnaissance bombers)
S-43 Serial 43--four-engine flying boat (Japanese flying boat. Kawanishi 97's were met in this area.)
S-31 Serial 31—two-engine flying boat (Hiro 91-1)
S-5 Serial 5—two-engine heavy bomber (Mitsubishi 97)
Naka 93 Nakajima 97—twin-float monoplane (fighter)

Contact—any aircraft encountered. All aircraft contacted were not engaged.
Destroyed—aircraft seen to burn, crash, or break up in the air. Aircraft destroyed on ground or water were verified by photographs or by several combat crews.
Damaged—aircraft known to have been hit by machine-gun fire because of smoke from aircraft, pieces of aircraft falling off, or maneuvers indicating that the plane was forced down. Several aircraft listed as damaged probably were destroyed.

II. Bombs Dropped

<table>
<thead>
<tr>
<th>Lbs.</th>
<th>1,000 lb.</th>
<th>500 lb.</th>
<th>200 lb.</th>
<th>100 lb.</th>
<th>Incendiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>14,000</td>
<td>235</td>
<td>142,500</td>
<td>245</td>
<td>104,400</td>
</tr>
</tbody>
</table>

Total all types: No. 1,719 - 369,100 lbs.

III. Bombing of Naval Targets

<table>
<thead>
<tr>
<th>Ships</th>
<th>Bombs</th>
<th>Average Altitude</th>
<th>Hit</th>
<th>Believed Damaged by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types</td>
<td>Contacts</td>
<td>Bombed</td>
<td>Dropped</td>
<td>Sunken</td>
</tr>
</tbody>
</table>

31 July to 20 September 1942

| All | 155 | 19 | 160* | 8,200* | 2 | 2 | 5 | 9 |

21 September to 31 October 1942

| BB* | 17 | 3 | 62 | 17,000 | - | 1* | - | 1 |
| CAA** | 46 | 9 | 73 | 11,000 | 1** | 2 | - | 3 |
| CL | 104 | 1 | 76 | 7,500 | - | - | - | - |
| DD | 256 | 3 | 28 | 11,000 | - | - | - | - |
| AV | 4 | - | - | - | - | - | - | - |
| AO | 3 | - | - | - | - | - | - | - |
| AP or AK | 77 | 12 | 163 | 8,600 | 1 | 3 | 3 | 7 |
| Unknown | 75 | - | - | - | - | - | - | - |
| SS*** | 10*** | - | - | - | - | - | - | - |

Totals | 600 | 28 | 402 | 10,100 | 2 | 6 | 3 | 11 | (Avg.)
### Ships Hit by Bombs, 1-30 November 1942

<table>
<thead>
<tr>
<th>Type</th>
<th>Contacts</th>
<th>Bombed</th>
<th>Dropped</th>
<th>Altitude</th>
<th>Sunk</th>
<th>Damaged</th>
<th>Near Miss</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB</td>
<td>8</td>
<td>1</td>
<td>23</td>
<td>14,000</td>
<td>-</td>
<td>1*</td>
<td>-</td>
<td>1</td>
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<tr>
<td>CA</td>
<td>14</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CL</td>
<td>32</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DD</td>
<td>198</td>
<td>1</td>
<td>23</td>
<td>14,700</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AV</td>
<td>4</td>
<td>1</td>
<td>30</td>
<td>20,000</td>
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<td>-</td>
<td>1</td>
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<tr>
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<td>-</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AP or AK</td>
<td>116</td>
<td>10***</td>
<td>180***</td>
<td>13,500</td>
<td>-</td>
<td>6****</td>
<td>-</td>
<td>6</td>
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<td>-</td>
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</tr>
<tr>
<td>SS</td>
<td>4</td>
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</tr>
<tr>
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<td>13</td>
<td>266</td>
<td>14,100</td>
<td>-</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

#### Recapitulation: 31 July to 30 November

| All | 1,163 | 60 | 828 | 10,200 | 4 | 15 | 9 | 28 |

#### Remarks:

**Period 31 July to 20 September**
* Of the 160 bombs dropped, 23 were 500-lb. bombs, the remainder 500-lb. Average altitude is a close approximation from data available.

**Period 21 September to 21 October**
* Burned for eight hours and disappeared during darkness. Verified by Marine pilot and land observers.
** Some confusion surrounded the identity of this ship. The Navy's PI Unit reported that it was a DD. All crew members in the B-17's stated that it was a CA, as did SEY pilots from Guadalcanal. A coast watch on Santa Isabel reported that it was a battleship.
*** Of the 10 submarines contacted, three were strafed from low altitude. All are known to have been hit, but no positive evidence of damage was seen.

**Period 1 to 30 November**
* This battleship had been damaged before it was attacked by B-17's; however it was still under way at the time the bombers attacked it. Two, and probably four, hits were made on it. After further attacks by planes from Guadalcanal the ship sank during the night of 13 November.
** This AV may have been damaged by near misses, though damage is not apparent in the photographs.
*** Of the 180 bombs dropped, 40 were 1,000-pounders and the remainder were 500-lb. bombs.

**** One ship was beached at the time it was bombed. Another ship was damaged and dead in the water when it was bombed.

IV. Aircraft Losses

Combat: 6
August--1; September--3; October--1; November--1.

Enemy action: 3
Badly damaged by bombing and naval gunfire while on Henderson Field on 13 October.

Operational: 11
August--4; September--5; October--1; November--1.

Unknown: 1
August--1 lost. One did not return from search mission. No contact with plane after take-off.

Total lost: 21

V. Combat Crew Losses

Combat: 62 officers and men

Missing in action: 46 officers and men. One enlisted man lost during shelling of Henderson Field.

Killed in action: 5 officers and men.

Seriously wounded and evacuated: 11 officers and men.

Operational: 39 officers and men

Missing: 18 officers and men.

Killed: 7 officers and men.

Injured and evacuated: 5 officers and men.

Unknown: 10 officers and men.

Total lost: 101 officers and men.
Appendix 2 - Personnel for General Harmon's Command as of 10 October 1942

<table>
<thead>
<tr>
<th>Unit</th>
<th>Off</th>
<th>10</th>
<th>15</th>
<th>EK</th>
<th>Approximate Shipment Date</th>
</tr>
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<tr>
<td>29th Serv Cp Hq &amp; Hq Sq</td>
<td>26</td>
<td>0</td>
<td>131</td>
<td></td>
<td>late November</td>
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<tr>
<td>40th Serv Sq</td>
<td>7</td>
<td>2</td>
<td>213</td>
<td></td>
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</tr>
<tr>
<td>82d Serv Sq</td>
<td>7</td>
<td>2</td>
<td>213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>637th Ord Co XII Avn Q</td>
<td>2</td>
<td>0</td>
<td>46</td>
<td></td>
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</tr>
<tr>
<td>638d Ord Co XII Avn Q</td>
<td>2</td>
<td>0</td>
<td>46</td>
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<td></td>
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<tr>
<td>703d Ord Co Avn AB</td>
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<tr>
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<td>76</td>
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<td>99</td>
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<td>3d Sig Co Serv Cp</td>
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<td>70</td>
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<td>673d Sig Al Co</td>
<td>15</td>
<td>6</td>
<td>333</td>
<td></td>
<td>no orders</td>
</tr>
</tbody>
</table>

**Rhodey (Pernhyn)**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Off</th>
<th>10</th>
<th>15</th>
<th>EK</th>
<th>Approximate Shipment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th Airway Det</td>
<td>4</td>
<td>0</td>
<td>50</td>
<td></td>
<td>mid-October</td>
</tr>
<tr>
<td>761st Engr Co Avn</td>
<td>5</td>
<td>0</td>
<td>173</td>
<td></td>
<td></td>
</tr>
<tr>
<td>701st Sig Al Co</td>
<td>9</td>
<td>2</td>
<td>139</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**New Caledonia**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Off</th>
<th>10</th>
<th>15</th>
<th>EK</th>
<th>Approximate Shipment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>13th Air Depot Cp Eq &amp; Hq Sq</td>
<td>19</td>
<td>0</td>
<td>150</td>
<td></td>
<td>mid-October</td>
</tr>
<tr>
<td>13th Repair Sq</td>
<td>10</td>
<td>0</td>
<td>240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13th Supply Sq</td>
<td>8</td>
<td>0</td>
<td>139</td>
<td></td>
<td></td>
</tr>
<tr>
<td>413th QM Flat AD Cp</td>
<td>2</td>
<td>0</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>700th Ord Co XII (Avn) Q</td>
<td>2</td>
<td>0</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>720th QM Flat Truck Avn (Sep)</td>
<td>2</td>
<td>0</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5th Serv Cp Hq &amp; Hq Sq</td>
<td>26</td>
<td>0</td>
<td>131</td>
<td></td>
<td>late November</td>
</tr>
<tr>
<td>29th Serv Sq</td>
<td>7</td>
<td>2</td>
<td>213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71st Serv Sq</td>
<td>7</td>
<td>2</td>
<td>213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34th Sig Co Serv Cp</td>
<td>2</td>
<td>1</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>722d Ord Co Avn AB</td>
<td>4</td>
<td>1</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1943d QM Co Trk Avn</td>
<td>3</td>
<td>0</td>
<td>99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>203d QM Co Trk Avn</td>
<td>3</td>
<td>0</td>
<td>99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>655th Ord Co XII Avn (Q)</td>
<td>2</td>
<td>0</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>625th Ord Co XII Avn (Q)</td>
<td>2</td>
<td>0</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>673d Sig Al Co</td>
<td>15</td>
<td>6</td>
<td>333</td>
<td></td>
<td>no orders</td>
</tr>
<tr>
<td>13th Troop Carrier Sq (ground echelon)</td>
<td>17</td>
<td>1</td>
<td>154</td>
<td></td>
<td>late November</td>
</tr>
<tr>
<td>905th Engr Cp Co AF</td>
<td>12</td>
<td>0</td>
<td>213</td>
<td></td>
<td>late November</td>
</tr>
<tr>
<td>955th Engr Top Co Avn</td>
<td>9</td>
<td>0</td>
<td>176</td>
<td></td>
<td>early November</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>OFF</th>
<th>WO</th>
<th>EM</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Espiritu Santo</td>
<td>31</td>
<td>0</td>
<td>776</td>
<td>mid-October</td>
</tr>
<tr>
<td>622d Engr Br Avn</td>
<td>2</td>
<td>1</td>
<td>70</td>
<td>&quot;</td>
</tr>
<tr>
<td>69th Sis Co Serv Grp</td>
<td></td>
<td></td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>Aitutaki</td>
<td>4</td>
<td>0</td>
<td>50</td>
<td>mid-October</td>
</tr>
<tr>
<td>10th Airwys Det</td>
<td>5</td>
<td>0</td>
<td>173</td>
<td>&quot;</td>
</tr>
<tr>
<td>890th Engr Avn</td>
<td>9</td>
<td>2</td>
<td>139</td>
<td>&quot;</td>
</tr>
<tr>
<td>703d Sis Avn (incl. Med. Det. of 4 EM)</td>
<td></td>
<td></td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>Efate (New Hebrides)</td>
<td>31</td>
<td>0</td>
<td>776</td>
<td>mid-October</td>
</tr>
<tr>
<td>388th Engr Avn</td>
<td></td>
<td></td>
<td></td>
<td>&quot;</td>
</tr>
</tbody>
</table>

The units for Tongareva, Espiritu Santo, Aitutaki, and Efate sailed as scheduled in the middle of October. Those for Fiji and New Caledonia left early in November.
Appendix 5 - Results of Operations by 5th and 11th Bombardment Groups (H) against Enemy Shipping, December 1943 through 28 February 1943

<table>
<thead>
<tr>
<th>Type</th>
<th>Contacts</th>
<th>Ships Bombed</th>
<th>Bombs Dropped</th>
<th>Number of Ships Directly Hit</th>
<th>Near Misses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BB or CA</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>36 x 1,000-lb.</td>
<td>2 (beached)*</td>
</tr>
<tr>
<td>CA</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CL</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CA or CL</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DD</td>
<td>73</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AV</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AO</td>
<td>2</td>
<td>2</td>
<td>36 x 1,000-lb.</td>
<td>2 (sunk)**</td>
<td>2</td>
</tr>
<tr>
<td>AF or AE</td>
<td>77</td>
<td>6</td>
<td>32 x 500-lb.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SS</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EL</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sloop</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Aux.</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unclass.</td>
<td>166</td>
<td>1</td>
<td>8 x 500-lb.</td>
<td>1 (beached)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>376</strong></td>
<td><strong>10</strong></td>
<td><strong>94</strong></td>
<td><strong>4</strong></td>
<td><strong>2</strong>*</td>
</tr>
</tbody>
</table>

* verified by photographs
** no photographs, but then last seen, ship burning and settling
*** results of near misses unknown

January

<table>
<thead>
<tr>
<th>Type</th>
<th>Contacts</th>
<th>Ships Bombed</th>
<th>Bombs Dropped</th>
<th>Number of Ships Directly Hit</th>
<th>Near Misses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BB or CA</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CA</td>
<td>2</td>
<td>2</td>
<td>40 x 500-lb.</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20 x 1,000-lb.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CL</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CA or CL</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CL or DD</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DD</td>
<td>146</td>
<td>15</td>
<td>40 x 500-lb.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>72 x 500-lb.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AO</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SS</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AF</td>
<td>16</td>
<td>2</td>
<td>8 x 500-lb.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AF or AO</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Exhibit IV, History of the 11th Bombardment Group (H).
<table>
<thead>
<tr>
<th>Type</th>
<th>Contacts</th>
<th>Ships Bombed</th>
<th>Bombs Dropped</th>
<th>Directly Hit</th>
<th>Number of Ships</th>
<th>Year</th>
<th>Misses</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK</td>
<td>185</td>
<td>15</td>
<td>2 x 1,000-lb.</td>
<td>Unobserved</td>
<td>2 x 1,000-lb.</td>
<td>1 (sunk)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 x 1,000-lb.</td>
<td>1 (burning)</td>
<td>4 x 1,000-lb.</td>
<td>2 (burning)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 x 1,000-lb.</td>
<td>1 (burning)</td>
<td>7 x 1,000-lb.</td>
<td>1 (burning)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>55 x 1,000-lb.</td>
<td></td>
<td>72 x 500-lb.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 x 500-lb.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unclass.</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. small craft</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>514</strong></td>
<td><strong>34</strong></td>
<td><strong>412 bombs</strong></td>
<td><strong>260,000 lbs.</strong></td>
<td><strong>8</strong></td>
<td><strong>4</strong></td>
<td></td>
</tr>
</tbody>
</table>

**February**

<table>
<thead>
<tr>
<th>Type</th>
<th>Contacts</th>
<th>Ships Bombed</th>
<th>Bombs Dropped</th>
<th>Directly Hit</th>
<th>Number of Ships</th>
<th>Year</th>
<th>Misses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>85 x 500-lb.</td>
<td>8 (on two)</td>
<td>3 (on one)</td>
</tr>
<tr>
<td>CA</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DD</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AO</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AK</td>
<td>12</td>
<td>3</td>
<td>85 x 500-lb.</td>
<td>8 (on two)</td>
<td>3 (on one)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CV</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP or AK</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unclass.</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. small craft</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>91</strong></td>
<td><strong>3</strong></td>
<td><strong>85 x 500-lb.</strong></td>
<td><strong>8 (2 believed sunk)</strong></td>
<td><strong>3 (probable damage to one)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4 - Number of Days Lost per 100 Flying Officers per month in the Guadalcanal Campaign.

<table>
<thead>
<tr>
<th></th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>January</th>
<th>February</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of officers reporting</td>
<td>269</td>
<td>310</td>
<td>618</td>
<td>834</td>
<td>645</td>
<td>1076</td>
</tr>
<tr>
<td>Wounds and injuries</td>
<td>36.08</td>
<td>9.65</td>
<td>3.52</td>
<td>9.96</td>
<td>27.00</td>
<td>20.35</td>
</tr>
<tr>
<td>All other causes</td>
<td>12.71</td>
<td>10.33</td>
<td>34.24</td>
<td>19.32</td>
<td>27.15</td>
<td>1.94</td>
</tr>
<tr>
<td>Flying fatigue</td>
<td>0.0</td>
<td>3.0</td>
<td>3.2</td>
<td>0.0</td>
<td>3.0</td>
<td>5.02</td>
</tr>
<tr>
<td>Dengue</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>9.01</td>
</tr>
<tr>
<td>Diarrheal diseases</td>
<td>1.64</td>
<td>3.33</td>
<td>1.44</td>
<td>2.52</td>
<td>.3</td>
<td>3.31</td>
</tr>
<tr>
<td>Malaria</td>
<td>0.0</td>
<td>1.66</td>
<td>24.80</td>
<td>24.36</td>
<td>52.65</td>
<td>54.55</td>
</tr>
</tbody>
</table>

# Incl. #2, ("Report of Inspection of the Medical Activities of the Thirteenth Air Force," undated, by Col. George F. Baier, III, M.C.);
"Report on days lost per 100 flying officer per month," in AAF, Bulk files, Air Surgeon material. This report was transmitted on 31 Dec. 1943.
Appendix 5 - Table of Distances in Nautical Miles from Enemy Airfields in the Solomons to Allied Bases in the South Pacific

<table>
<thead>
<tr>
<th></th>
<th>Guadalcanal</th>
<th>Espiritu Santo</th>
<th>Efate</th>
<th>New Caledonia</th>
<th>Noumea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kunda</td>
<td>180</td>
<td>740</td>
<td>870</td>
<td>830</td>
<td>1,010</td>
</tr>
<tr>
<td>Baillele</td>
<td>285</td>
<td>845</td>
<td>975</td>
<td>935</td>
<td>1,115</td>
</tr>
<tr>
<td>Kahili</td>
<td>300</td>
<td>860</td>
<td>990</td>
<td>950</td>
<td>1,130</td>
</tr>
<tr>
<td>Buka</td>
<td>400</td>
<td>960</td>
<td>1,090</td>
<td>1,050</td>
<td>1,230</td>
</tr>
</tbody>
</table>

The effective radius of the Japanese Type O1 bomber (Betty) was estimated to be 1,000 nautical miles on reconnaissance and 750 miles when carrying torpedoes or bombs.

Appendix 6 - Estimate of Enemy Land-based Aircraft Strength in the Solomon Islands Area as of 20 February 1943

<table>
<thead>
<tr>
<th></th>
<th>Fighters</th>
<th>Bombers</th>
<th>F/BP</th>
<th>F/P</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Ireland</td>
<td>70</td>
<td>76</td>
<td>8</td>
<td>13</td>
<td>14</td>
<td>181</td>
</tr>
<tr>
<td>New Britain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bougainville-Buin-Faisi</td>
<td>85</td>
<td>26</td>
<td>8</td>
<td>27</td>
<td>4</td>
<td>150</td>
</tr>
<tr>
<td>New Georgia</td>
<td>27</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>35</td>
</tr>
<tr>
<td>Gilberts (including Nauru)</td>
<td>24</td>
<td>24</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>134</td>
<td>16</td>
<td>40</td>
<td>18</td>
<td>414</td>
</tr>
</tbody>
</table>

F/BP - float biplane
F/P - float plane

# G-2 Periodic Report #5, Hq, USAFISPA, 13 Feb. to 20 Feb. 1943
Appendix 7 - Combat Statistics of Fighter Aircraft Based on Guadalcanal, February, 1943

<table>
<thead>
<tr>
<th></th>
<th>F4F</th>
<th>P-40</th>
<th>P-59</th>
<th>P-39</th>
<th>P-40 (K22AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Zero</td>
<td>4 Zero</td>
<td>5 Zero</td>
<td>3 Zero</td>
<td>10 Zero</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Total:</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Allied plane losses from combat missions

<table>
<thead>
<tr>
<th></th>
<th>F4F</th>
<th>F4U</th>
<th>P-59</th>
<th>P-39</th>
<th>P-40</th>
<th>P-40 (K22AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oper. Comb.</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Oper. Comb.</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>none</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Total: 22 in combat
|     | 8 operational (not including take-off or landing losses while on a combat flight) |
| F/3P - float biplane |

# Incl., (War Diary, KAG-12), "Record of Events, Fighter Command, Guadalcanal, February 1, 1943 to July 25, 1943."
Appendix 8 – Availability of Fighter Aircraft on Guadalcanal during February 1943

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>F4U</th>
<th>F4F</th>
<th>P-38</th>
<th>P-39</th>
<th>P-40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. a/c assigned</td>
<td>108</td>
<td>10</td>
<td>57</td>
<td>13</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Avg. a/c in commission</td>
<td>67</td>
<td>7</td>
<td>34</td>
<td>9</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Percent a/c in commission</td>
<td>62%</td>
<td>70%</td>
<td>60%</td>
<td>70%</td>
<td>69%</td>
<td>50%</td>
</tr>
<tr>
<td>Avg. no. pilots assigned</td>
<td>198</td>
<td>16</td>
<td>55</td>
<td>29</td>
<td>65</td>
<td>33</td>
</tr>
<tr>
<td>Avg. no. pilots available</td>
<td>112</td>
<td>15</td>
<td>47</td>
<td>16</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Percent pilots available</td>
<td>56%</td>
<td>94%</td>
<td>85%</td>
<td>55%</td>
<td>32%</td>
<td>40%</td>
</tr>
</tbody>
</table>

A direct comparison of the percentage of pilots available in AAF, Marine, and Navy units may create an erroneous impression because of the difference in the method of handling planes and personnel. The Navy and Marine Corps moved their units in a body, an entire squadron at a time, and aircraft normally would transfer along with the personnel. In contrast, the AAF moved all or part of a squadron, leaving the planes behind to be flown ahead by pilots from other squadrons.

\* Incl. (War Diary, 1AD-12), "Record of Events, Fighter Command, Guadalcanal, February 1, 1943 to July 25, 1943."
Appendix 9 – Strength Report of AAF units in New Caledonia as of 30 September 1942:

<table>
<thead>
<tr>
<th>Air Forces</th>
<th>Off</th>
<th>WO</th>
<th>EX</th>
<th>Complete Combat Crews</th>
</tr>
</thead>
<tbody>
<tr>
<td>69 Bomb Sq (N)</td>
<td>58</td>
<td>0</td>
<td>247</td>
<td>22</td>
</tr>
<tr>
<td>67 Ftr Sq</td>
<td>70</td>
<td>0</td>
<td>261</td>
<td></td>
</tr>
<tr>
<td>Det 0 Ftr Cont Sq</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>65 Serv Sq</td>
<td>8</td>
<td>0</td>
<td>260</td>
<td></td>
</tr>
<tr>
<td>361 B Hq. w AB Sq</td>
<td>9</td>
<td>0</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>Air Office Americal Div</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Det 7 Gom Sq</td>
<td>1</td>
<td>0</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Det 7 Wcn Sq</td>
<td>1</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>AF Arms &amp; Services</strong></td>
<td>154</td>
<td>0</td>
<td>874</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AF Arms &amp; Services</th>
<th>Off</th>
<th>WO</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>140 Cal Inf</td>
<td>2</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Det 151 Cal Deco Co (Avn)</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>810 Engr BN (Avn)</td>
<td>24</td>
<td>1</td>
<td>597</td>
</tr>
<tr>
<td>811 Engr BN (Avn)</td>
<td>24</td>
<td>1</td>
<td>602</td>
</tr>
<tr>
<td>4 Fld, 445 Ord Co Avn (Bomb)</td>
<td>1</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td>619 Ord Co lM (Avn)</td>
<td>2</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>220 Ord Co lM (Avn)</td>
<td>2</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>22 Fld 676 Ord Co lM (Avn)</td>
<td>1</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>201 QM Co Serv Co (Avn)</td>
<td>3</td>
<td>0</td>
<td>48</td>
</tr>
<tr>
<td>705 QM Co Trk. (Avn)</td>
<td>4</td>
<td>0</td>
<td>97</td>
</tr>
<tr>
<td>700 Sig AN Co</td>
<td>10</td>
<td>0</td>
<td>197</td>
</tr>
</tbody>
</table>

Appendix 10 - Strength Report of II Island Air Command (Fiji) as of 31 October 1942.

<table>
<thead>
<tr>
<th>Air Forces</th>
<th>Off</th>
<th>WO</th>
<th>EM</th>
<th>AF Arms &amp; Services</th>
<th>Off</th>
<th>WO</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ho &amp; Ho Sq, II Island Air Comd</td>
<td>12</td>
<td>0</td>
<td>23</td>
<td>Fire Det</td>
<td>1</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>70 Bomb Sq (II) (58 Gp)</td>
<td>52</td>
<td>0</td>
<td>252</td>
<td>Med Det</td>
<td>3</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>70 Ftr Sq (547 Gp)</td>
<td>35</td>
<td>0</td>
<td>214</td>
<td>445 Ord Co Avn (Bomb)</td>
<td>1</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>Det 25 FC Sq</td>
<td>1</td>
<td>0</td>
<td>83</td>
<td>693 Ord Co Avn (F)</td>
<td>1</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>375 B Hq &amp; AB Sq</td>
<td>11</td>
<td>2</td>
<td>146</td>
<td>1096 Ord Co Avn (AB)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Det 23 Serv Sq</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>(Formerly 755)</td>
<td>4</td>
<td>0</td>
<td>58</td>
</tr>
<tr>
<td>*Det 59 Serv Sq</td>
<td>1</td>
<td>0</td>
<td>13</td>
<td>8 Sig. Co Ser Gp</td>
<td>1</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>*Det 362 Serv Sq</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>698 Sig. A.' Rept Co</td>
<td>20</td>
<td>1</td>
<td>175</td>
</tr>
<tr>
<td>*Det 7 Wes. Sq</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Det 7 Airways Com Sq</td>
<td>2</td>
<td>1</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Airways Det (7 Airways Sq)</td>
<td>4</td>
<td>3</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF Arms &amp; Services</td>
<td>119</td>
<td>3</td>
<td>829</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>1</td>
<td>342</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>139</td>
<td>4</td>
<td>1171</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Reported on temporary duty from parent units.

### Appendix 11 - Strength Report of I Island Air Command (New Caledonia) as of 31 January 1943#

<table>
<thead>
<tr>
<th>Air Forces</th>
<th>Off</th>
<th>WO</th>
<th>EM</th>
<th>Complete</th>
<th>AF Arms &amp; Services</th>
<th>Off</th>
<th>WO</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hq &amp; Hq Sq I Island Air Command</td>
<td>21</td>
<td>1</td>
<td>86</td>
<td></td>
<td>1040  Ord Co</td>
<td>4</td>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td>347 Elec Sq (Hq, 67, 68, 339, Det 0, CTS)</td>
<td>145</td>
<td>716</td>
<td>105</td>
<td></td>
<td>1620  Ord 12 Co Avn (q)</td>
<td>2</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Det 4 Airways Sq</td>
<td></td>
<td>48</td>
<td></td>
<td></td>
<td>1655  Ord 13 Co Avn (q)</td>
<td>2</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Det 17 Wca Sq</td>
<td>3</td>
<td>40</td>
<td></td>
<td></td>
<td>1619  Ord 14 Co Avn (q)</td>
<td>1</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>361 B Hq AB Sq</td>
<td>18</td>
<td>163</td>
<td></td>
<td></td>
<td>1635  Ord 15 Co Avn (q)</td>
<td>2</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>6 Serv Gr (Hq &amp; Hq Sq, 65, 71)</td>
<td>226</td>
<td>1 654</td>
<td>105</td>
<td></td>
<td>164  5/ Co Avn</td>
<td>5</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>AF Arms &amp; Services</td>
<td>58</td>
<td>2 1077</td>
<td></td>
<td></td>
<td>1943  5/ Co Trk (Avn)</td>
<td>3</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td></td>
<td>234</td>
<td>4 2731</td>
<td></td>
<td></td>
<td>201  5/ Co Trk 6 (Avn)</td>
<td>5</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>54  5/ Co Serv Gr</td>
<td>2</td>
<td>1</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>579  Sig Av Bn</td>
<td>32</td>
<td>2</td>
<td>1077</td>
</tr>
</tbody>
</table>

# Organization Strength Report, I Island Air Command, 12 February 1943, in AMISC Personnel Statistics.
Appendix 12 - Strength Report of II Island Air Command (Fiji) as of 31 January 1943

<table>
<thead>
<tr>
<th>Air Force</th>
<th>Off</th>
<th>WO E</th>
<th>Complete Combat Crews</th>
<th>AF Arms &amp; Services</th>
<th>Off</th>
<th>WO</th>
<th>EN</th>
</tr>
</thead>
<tbody>
<tr>
<td>HQ &amp; Eq Sq II Is Air Cmd</td>
<td>10</td>
<td>3</td>
<td>88</td>
<td>621 Engr Bn (Sep)</td>
<td>34</td>
<td>1</td>
<td>722</td>
</tr>
<tr>
<td>**70 Bomb Sq (H) 39 Cp</td>
<td>47</td>
<td>266</td>
<td>10</td>
<td>Fin Det</td>
<td>1</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>394 Bomb Sq (H) 5 Cp</td>
<td>38</td>
<td>303</td>
<td>10</td>
<td>Med Det</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**70 Ftr Sq (347 Cp)</td>
<td>33</td>
<td>237</td>
<td>25</td>
<td>1066 Ord Co Avm (AB)</td>
<td>3</td>
<td>1</td>
<td>62</td>
</tr>
<tr>
<td>375 B Hc &amp; AB Sq</td>
<td>11</td>
<td>164</td>
<td>49</td>
<td>1620 Ord M Co Avm (Q)</td>
<td>2</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Airways Det</td>
<td>3</td>
<td>1</td>
<td>81</td>
<td>Postal Det</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Det 25 Fg Sq (Com Sec)</td>
<td>1</td>
<td>81</td>
<td>416</td>
<td>2013 CI Co Trk (Avm)</td>
<td>3</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>303 AB Security Bn</td>
<td>10</td>
<td>416</td>
<td>15</td>
<td>3 Sig Flot (AB)</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 Serv Sq (6 Serv Cp)</td>
<td>2</td>
<td>2</td>
<td>181</td>
<td>672 Sig Air Co</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atchd Unasgd</td>
<td>3</td>
<td>1</td>
<td>1745</td>
<td>698 Reptr Co (A)</td>
<td>8</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td>** Total **</td>
<td>** 176 **</td>
<td>** 6 **</td>
<td>** 1745 **</td>
<td>** 45 **</td>
<td>** 65 **</td>
<td>** 3 **</td>
<td>** 1605 **</td>
</tr>
</tbody>
</table>

Supplementary report

| 23 Serv Cp (HQ & HQ Sq | 40 & 82) | 40 | 2 | 558 |
| Supplementary report AF Arms & Services | 20 | 1 | 493 |
| Total first report | 241 | 9 | 3250 |
| Supplementary report | 60 | 3 | 1051 |
| Total | 301 | 12 | 4301 |

*6 Off, missing in action, believed dead, are included.
**4 Off, missing in action, believed dead, are included.

Appendix 13 - Consolidated Strength Report, Thirteenth Air Force, as of 28 February 1943.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hq &amp; Hq Sq I Island Air Cmnd</td>
<td>19</td>
<td>84</td>
<td></td>
<td></td>
<td>811</td>
<td>Engr En Avn (Sep)</td>
<td>21</td>
</tr>
<tr>
<td>Hq &amp; Hq Sq II Island Air Cmnd</td>
<td>18</td>
<td>3</td>
<td>48</td>
<td></td>
<td>821</td>
<td>Engr En Avn (Sep)</td>
<td>34</td>
</tr>
<tr>
<td>Hq &amp; Hq Sq 13 AF</td>
<td>33</td>
<td>4</td>
<td>89</td>
<td></td>
<td>890</td>
<td>Engr Co (Avn)</td>
<td>4</td>
</tr>
<tr>
<td>Hq &amp; Hq Sq XIII Bomber Cmnd</td>
<td>2</td>
<td>9</td>
<td></td>
<td></td>
<td>906</td>
<td>Engr Hq Co (Avn)</td>
<td>10</td>
</tr>
<tr>
<td>Hq &amp; Hq Sq XII Ftr Cmnd</td>
<td>3</td>
<td>6</td>
<td></td>
<td></td>
<td>Det Med Dept APO 913</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>5 Bomb Gp (H) (Hq, 23, 31, 72)</td>
<td>225</td>
<td>3</td>
<td>1406</td>
<td>35</td>
<td>1031</td>
<td>Ord Co Avn (AB)</td>
<td>4</td>
</tr>
<tr>
<td>11 Bomb Gp (H) (Hq, 26, 42, 98, 431)</td>
<td>73</td>
<td>4</td>
<td>1241</td>
<td>6</td>
<td>1040</td>
<td>Ord Co Avn (AB)</td>
<td>see</td>
</tr>
<tr>
<td>327 Bomb Gp (H) (Hq, 370, 421)</td>
<td>160</td>
<td>2</td>
<td>246</td>
<td>21</td>
<td>supplementary report</td>
<td>2</td>
<td>37</td>
</tr>
<tr>
<td>327 Ftr Gp (EL) (Hq, 67, 68, 70)</td>
<td>58</td>
<td>2</td>
<td>263</td>
<td>12</td>
<td>1066</td>
<td>Ord Co Avn (AB)</td>
<td>3</td>
</tr>
<tr>
<td>327 Ftr Gp (EL)</td>
<td>327</td>
<td>870</td>
<td>176</td>
<td></td>
<td>1619</td>
<td>Ord IM Co Avn (O)</td>
<td>1</td>
</tr>
<tr>
<td>44 Ftr Sq (S2) (Sep) (318 Gp)</td>
<td>3</td>
<td>3</td>
<td>212</td>
<td>24</td>
<td>1620</td>
<td>Ord IM Co Avn (O)</td>
<td>2</td>
</tr>
<tr>
<td>29 Serv Gp (Hq &amp; Hq Sq, 40, 82)</td>
<td>45</td>
<td>2</td>
<td>561</td>
<td>14</td>
<td>1637</td>
<td>Ord IM Co Avn (O)</td>
<td>2</td>
</tr>
<tr>
<td>4 Photo Gp</td>
<td>72</td>
<td>2</td>
<td>523</td>
<td>14</td>
<td>1652</td>
<td>Ord IM Co Avn (O)</td>
<td>2</td>
</tr>
<tr>
<td>4 Photo Gp</td>
<td>72</td>
<td>2</td>
<td>523</td>
<td>14</td>
<td>1655</td>
<td>Ord IM Co Avn (O)</td>
<td>2</td>
</tr>
<tr>
<td>3 Ftr Carr Sq</td>
<td>58</td>
<td>1</td>
<td>213</td>
<td>13</td>
<td>1700</td>
<td>Ord IM Co Avn (O)</td>
<td>2</td>
</tr>
<tr>
<td>3 Ftr Carr Sq</td>
<td>58</td>
<td>1</td>
<td>213</td>
<td>13</td>
<td>1642</td>
<td>Ord IM Co Avn (O)</td>
<td>2</td>
</tr>
<tr>
<td>201 Ftr Sq</td>
<td>413</td>
<td>2</td>
<td>46</td>
<td>22</td>
<td>1642</td>
<td>Ord IM Co Avn (O)</td>
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</tr>
<tr>
<td>67 Ferrying Sq</td>
<td>7</td>
<td>46</td>
<td></td>
<td>13</td>
<td>1932</td>
<td>Ord IM Co Avn (O)</td>
<td>3</td>
</tr>
</tbody>
</table>

* 394 Bomb Sq (H), 70 Bomb Sq (M), 70 Ftr Sq reported by Fiji II Island Air Command.
  7 officers, 70 Bomb Sq (M) and 4 officers, 70 Ftr Sq (S2) included, are missing in action.
** Reported by Espiritu Santo. 424 Bomb Sq (H), 44 Ftr Sq, 12 Ftr Sq at Guadalcanal.

### Air Forces

<table>
<thead>
<tr>
<th>Unit</th>
<th>Off</th>
<th>WO</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>361 B Hq &amp; AB Sq</td>
<td>29</td>
<td>1</td>
<td>181</td>
</tr>
<tr>
<td>376 B Hq &amp; AB Sq</td>
<td>10</td>
<td>1</td>
<td>141</td>
</tr>
<tr>
<td>9 Airways Det</td>
<td>4</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>10 Airways Det</td>
<td>4</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>20 Airways Com Sq</td>
<td>20</td>
<td>1</td>
<td>191</td>
</tr>
<tr>
<td>901 AB Sec Bn</td>
<td>18</td>
<td>1</td>
<td>403</td>
</tr>
<tr>
<td>902 AB Sec Bn</td>
<td>18</td>
<td>1</td>
<td>404</td>
</tr>
<tr>
<td>903 AB Sec Bn</td>
<td>13</td>
<td>1</td>
<td>416</td>
</tr>
<tr>
<td>13 AB Gp (Hq, Sq, Rep, Sup)</td>
<td>33</td>
<td>1</td>
<td>737</td>
</tr>
<tr>
<td>Enroute</td>
<td>41</td>
<td>1</td>
<td>675</td>
</tr>
</tbody>
</table>

**Total:** 1241-2-5115-301

### AF Arms & Services

<table>
<thead>
<tr>
<th>Unit</th>
<th>Off</th>
<th>WO</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 QI Co Erk (Avn)</td>
<td>3</td>
<td>1</td>
<td>97</td>
</tr>
<tr>
<td>2484 QI Co Erk (Avn)</td>
<td>2</td>
<td>1</td>
<td>53</td>
</tr>
<tr>
<td>3 Sig Co Serv Gp</td>
<td>2</td>
<td>1</td>
<td>75</td>
</tr>
<tr>
<td>6 Sig Co Serv Gp</td>
<td>1</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>575 Sig Avn Bn</td>
<td>33</td>
<td>1</td>
<td>539</td>
</tr>
<tr>
<td>578 Sig Avn Bn</td>
<td>23</td>
<td>1</td>
<td>507</td>
</tr>
<tr>
<td>579 Sig Avn Bn</td>
<td>33</td>
<td>1</td>
<td>539</td>
</tr>
<tr>
<td>702 Sig Avn Co</td>
<td>10</td>
<td>1</td>
<td>144</td>
</tr>
<tr>
<td>905 Sig Co Depot (Avn)</td>
<td>6</td>
<td>1</td>
<td>175</td>
</tr>
<tr>
<td>Other A &amp; S personnel</td>
<td>18</td>
<td>1</td>
<td>479</td>
</tr>
</tbody>
</table>

**Total:** 237-8-5117-301

### Supplementary Report

<table>
<thead>
<tr>
<th>Unit</th>
<th>Off</th>
<th>WO</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 Bomb Sq (M)</td>
<td>52</td>
<td>2</td>
<td>864</td>
</tr>
<tr>
<td>6 Serv Gp (Hq, Sq, 38</td>
<td>49</td>
<td>3</td>
<td>906</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>25 Ftr Control Sq (Com Sec)</td>
<td>1</td>
<td>2</td>
<td>83</td>
</tr>
</tbody>
</table>

**Total:** 101-3-1,283-10

### AF Arms & Services

<table>
<thead>
<tr>
<th>Unit</th>
<th>Off</th>
<th>WO</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>2</td>
<td>225</td>
</tr>
</tbody>
</table>

**Total:** 110-5-1,498-10

---

* 294 Bomb Sq (M), 70 Bomb Sq (M), 70 Ftr Sq reported by Fiji-11 Island Air Command.
  7 officers, 70 Bomb Sq (M) and 4 officers, 70 Ftr Sq (SE) included, are missing in action.

** Supplementary Report as of 24 March 1945.**
Not listed in above report, but reported separately

<table>
<thead>
<tr>
<th></th>
<th>Off</th>
<th>WO</th>
<th>II</th>
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<tbody>
<tr>
<td>12 Ftr Sq</td>
<td>33</td>
<td>221</td>
<td>23</td>
</tr>
<tr>
<td>Fiji-II Island Air Command</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atchd Unasgd</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hq &amp; Hq Sq</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atchd Unasgd</td>
<td>375 AB Sq</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Air Forces</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated report</td>
<td>1241</td>
<td>24</td>
</tr>
<tr>
<td>Supplementary report</td>
<td>101</td>
<td>3</td>
</tr>
<tr>
<td>Fiji (12 Ftr Sq)</td>
<td>33</td>
<td>221</td>
</tr>
<tr>
<td>Fiji (Atchd, unasgd)</td>
<td>375 AB Sq</td>
<td>3</td>
</tr>
<tr>
<td>Fiji (12 Ftr Sq)</td>
<td>1378</td>
<td>29</td>
</tr>
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<td>AF Arms &amp; Services</td>
<td>243</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>1627</td>
<td>39</td>
</tr>
</tbody>
</table>

Total strength 17,606
Appendix 14 - Enemy Aircraft Destroyed and Damaged in the Solomons Area in December 1943

Jay types
destroyed by

<table>
<thead>
<tr>
<th></th>
<th>41.1</th>
<th>41.2</th>
<th>4/F/P</th>
<th>4/F</th>
<th>4/F/B</th>
<th>4.96 X/B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAF-4</td>
<td>20</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td></td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>SBD</td>
<td>13</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>FBO</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>P-39</td>
<td>5</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>P-39</td>
<td>4</td>
<td>3</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>B-17</td>
<td>7</td>
<td>4</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Uncertain</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>16</td>
<td>1</td>
<td>85</td>
</tr>
</tbody>
</table>

Destroyed in the air - 60; destroyed on the ground - 25.

41.1 - Zero Type 1 (Mitsubishi 00 "Zeka")
41.2 - Zero Type 2 (Mitsubishi 00 Mk. 2 "Harp")
4/F/P - Float Zero fighter (Mitsubishi 00 "Fine")
4/F/B - Float biplane
4.96 X/B - Type 96 medium bomber (Mitsubishi 96 "Holl")
FBO - Lockheed Hudson (NZAF)

Appendix 15 - Enemy Aircraft Destroyed and Damaged in the Solomons Area in January 1943

<table>
<thead>
<tr>
<th>Jap types destroyed by</th>
<th>φ T.1</th>
<th>φ T.2 (underig.)</th>
<th>φ F/F</th>
<th>F/FP</th>
<th>T.01 M/B</th>
<th>T.99 D/B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM-4</td>
<td>3</td>
<td>11</td>
<td>18</td>
<td>1</td>
<td>12</td>
<td>4</td>
<td>49</td>
</tr>
<tr>
<td>TBF</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>SBK</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>P-38</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>P-39</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-17</td>
<td>6</td>
<td>2</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-40</td>
<td></td>
<td>2</td>
<td>10</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guadalcanal AA</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Uncertain</td>
<td>9</td>
<td>9</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>14</td>
<td>29</td>
<td>7</td>
<td>17</td>
<td>14</td>
<td>4</td>
</tr>
</tbody>
</table>

φ T.1 = Zero Type 1 (Mitsubishi 00 "Kaze")
φ T.2 = Zero Type 2 (Mitsubishi 00 "Hemp")
φ F/F = Float Zero fighter (Mitsubishi 00 "Rufe")
F/FP = Float biplane
T.01 M/B = Type 01 medium bomber (Mitsubishi 01 "Betty")
T.99 D/B = Type 99 dive bomber (Aichi 99 "Val")

Appendix 15 – Enemy Aircraft Destroyed and Damaged in the Solomons Area in February 1943

Jay types destroyed by

<table>
<thead>
<tr>
<th></th>
<th>φ (both types)</th>
<th>F/P</th>
<th>F/FP</th>
<th>T.99 D/B</th>
<th>T.O1 M/B</th>
<th>Unident.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P4F-4</td>
<td>22</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>F4U</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>P-38</td>
<td>7</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>P-39</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>P-40</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>SBD</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>ZBF</td>
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<td></td>
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<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>D-17</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>B-24</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>DD's</td>
<td>6</td>
<td>1</td>
<td></td>
<td>5</td>
<td>3</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>or AP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertain</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>17</td>
<td>5</td>
<td>104</td>
</tr>
</tbody>
</table>

φ = Zero fighter (Mitsubishi 00 1X. 1 and 2.)
φ F/P = Float Zero fighter (Mitsubishi 00 "Rufe")
F/FP = Float biplane
T.99 D/B = Type 99 dive bomber (Aichi 99 "Val")
T.O1 M/B = Type 01 medium bomber (Mitsubishi 01 "Betty")

Appendix 17 - Summary of Japanese Planes Destroyed by South Pacific Forces from 1 August 1942 to 28 February 1943:

<table>
<thead>
<tr>
<th>Month</th>
<th>Number Destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>229</td>
</tr>
<tr>
<td>September</td>
<td>119</td>
</tr>
<tr>
<td>October</td>
<td>370</td>
</tr>
<tr>
<td>November</td>
<td>133</td>
</tr>
<tr>
<td>December</td>
<td>87</td>
</tr>
<tr>
<td>January</td>
<td>111</td>
</tr>
<tr>
<td>February</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,158</td>
</tr>
</tbody>
</table>

# These are over-all figures and include the scores of all services. The great majority of these planes were shot down by the Marines. "Enemy Aircraft Destroyed and Damaged in the Solomons Area by South Pacific Forces for the month of February 1943," South Pacific Force, United States Pacific Fleet, office of Naval Air Combat Intelligence, in USCG Hist. Div. files.
Appendix 18 - Record of U. S. Pilots at Guadalcanal, 20 August 1942 to 23 March 1943

<table>
<thead>
<tr>
<th></th>
<th>20 August 1942 to 15 February 1943</th>
<th>15 February 1943 to 23 March 1943</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enemy ships sunk</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>Enemy ships believed sunk</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Enemy ships damaged</td>
<td>64</td>
<td>3</td>
</tr>
<tr>
<td>Enemy planes shot down in air combat</td>
<td>634</td>
<td>12</td>
</tr>
<tr>
<td>Enemy planes shot down by AA</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Enemy planes destroyed on ground</td>
<td>37</td>
<td>2</td>
</tr>
<tr>
<td>U.S. planes shot down by enemy AA</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>U.S. pilots recovered</td>
<td>80</td>
<td>17</td>
</tr>
<tr>
<td>Other aviation personnel (U.S.) recovered</td>
<td>43</td>
<td>22</td>
</tr>
</tbody>
</table>

Between 20 August 1942 and 23 March 1943, 182 U.S. aircraft were shot down in combat with Japanese planes.

* Bulk files of NARAIRSOAC, in USIC Hist. Div. files. The above record includes the scores of all services operating from Guadalcanal.
Banika Island, 158, 179
Barton, 114, 203 (n 117)
Base Services, Director of, 128
Beaufort Bay, 151
Bell Co., 140
Bendix turret, 208 (n 4)
Betelgeuse, 205 (n 114)
Betty (plane), 33
Bismarck Archipelago, 12
"Black Cat" squadrons, 103, 163
Boeing Co., 225 (n 59)
Boise, 198 (n 48)
Bombardment (AFRDE), 175
Bomber #1, 164
Bomber #2, 135, 164, 209 (n 18)
Bomber Commander, 15th AF, 89
Bonag River, 156
Bora Bora, 142-147
Bougainville, 12, 19, 23, 30-32, 55, 74, 104-105, 157-160, 165, 169, 216 (n 58), 233 (n 69)
Bremer, Maj. Gen. D. F., 8, 56
Breene, Maj. Gen. R. A., 6, 17, 122, 127, 129, 134, 136, 139-139, 143, 225 (n 59)
Brisbane, 218 (n 56)
British, 8, 102, 162
British Solomon Islands Defense Force, 104
Brown, Maj. F. O., 215 (n 27)
Browning, R., 104
BT-13, 169
Buin, 11-12, 14, 17, 19, 21, 29, 55-58, 64-66, 69-70, 74, 77, 81, 104, 155, 158-160, 165-166, 178, 180, 182, 190, 207 (n 143), 214 (n 10), 217 (n 45), 233 (n 65, 69), 219 (n 16)
Buin-Tonolei Harbor, 22
Buka, 14, 20, 31, 33, 74, 77, 82, 104-105, 158-160, 165-180, 214 (n 10), 239 (n 9)
Buka Field, 231 (n 41)
Buka Passage, 19, 76-77
Burek, Lt. G. J., 96
Bureau of Aeronautics, Chief of, 93
C
C-47, 39, 107, 110-112, 116-116, 120, 218 (n 53), 219 (n 66), 220 (n 83)
C-55, 107
C-78, 109
C-87, 112, 115-118
CACTUS, 9, 15, 170, 207 (n 141), 228 (n 4)
Callaghan, Adm., 54-55
Canton Island, 4, 11, 86, 169
Cape Esperance, 82, 150, 156, 178
Cape Esperance, Battle of, 32
Catalina (plane), 76, 80
Charters, Capt. J. J., 169
Chesney, Lt. Comdr. W., 96
Chester, 42
Cheyenne Modification Center, 69
Choiseul Island, 19, 89, 181, 240 (n 14)
Christian missions, 103
Christmas Island, 11, 86, 202 (n 103), 238 (n 107)
Clemons, Maj. W. F., 104, 216 (n 37)
Coast Watchers, 102-103, 216 (n 36)
Cobb, Lt. Comdr. J. C., 217 (n 44)
Coffin, Lt. A. F., 205 (n 123)
Collins, Maj., 204 (n 122)
Colorado Springs, 213 (n 10)
Colt, Lt. C. C., 96
COMAIR, 94
COMAIRONE, 32, 113
Combined Chiefs of Staff, 86, 174
Commander, South Pacific Area (COMSOPAC), 3-4, 7, 11, 13-14, 16-17, 31, 42, 44, 48-50, 55, 55-57, 71, 75, 76, 84, 92, 100, 144, 156, 213 (n 2), 215 (n 29)
Commander Aircraft, South Pacific (COMAIRSOPAC), 3-5, 7, 10, 42, 73-75, 82, 84, 90, 93, 105, 115, 165, 209 (n 16), 213 (n 9)
Chief of Staff, 188
Commander in Chief, U. S. Pacific Fleet (CINCPOAC), 3, 43, 92.
See also Nimitz.
Commanding General, AAF, 78, 81
Commanding General South Pacific (COMENSOPAC), 7, 10, 11, 13-14, 13, 71, 77-78, 83, 85-86, 105, 110, 112, 117-118, 122, 126, 129-131, 141-142, 144, 164, 175, 195 (n 1), 222 (n 2)
Communications (AFSC), 141
Congress, 200 (n 81)
Consolidated Co., 225 (n 59)
Coral Sea, 144
CONFIDENTIAL

Corsair (plane), 181-182, 184
Cox, Maj. C., 99
Crom, Capt. J. E., 119
Curtiss, 7, 92, 97-99, 215 (n 2)
Curtiss-Wright Co., 225 (n 59)
Crushing, 203 (n 117)

D

D-1A meter, 115
D-day, 7, 153
D'Entrecasteaux Reef, 114
"Depot and Ready Reserve" aircraft, 235 (n 85)
DFC, 205 (n 127), 219 (n 66)
Dimo, Lt. W., 46, 216 (n 56)
Dona Cove, 150
Dona Reef, 39
"Dugout Sunday," 47
Dumbo, 153
"Dumbo," 105-106, 207 (n 144), 217 (n 45)
Duncan, 32, 198 (n 48)
Dyer, Lt., 134

E

8th Marine Regt., 149
11th Bomb. Gp., 2, 6-7, 23-25,
27-29, 42, 50, 66-69, 72, 77,
92-93, 96-97, 99-100, 102, 109,
116, 125, 131, 142, 159, 167-169,
180, 186, 190, 195 (n 5),
202 (n 103), 234 (n 76),
235 (n 83), 240 (n 12), 241 (n 25)
Eq. and Eq. Sq., 27
11th Marine Regt., 149
18th Combat (Photo) Mapping Sq.,
214 (n 12)
18th Fighter Gp., 162, 216 (n 35)
18th Photo Mapping Sq., 94-95
52d Service Sq., 153
601st Medical Air Evacuation
Transport Sq., 221 (n 87). See
also 801st Medical Sq.
601st Medical Sq., 118-120,
221 (n 87)
811th Engineers, 130
887th Chemical Co., 29-29

Eagle Farms, 175
Ekato, 7-C, 54, 57-58, 64, 81,
120, 123, 134, 139, 219 (n 63),
66, 220 (n 83), 221 (n 86),
225 (n 53), 235 (n 85)
Emons, Gen., 9, 24, 26-28, 42,
123, 127, 144, 158-169
Enterprise, 42, 45, 49-49, 53,
56-59, 61, 64, 205 (n 123)
Esperita Sento, 7-8, 12, 17,
22-23, 25, 27, 29-30, 32,
38, 40, 44-45, 47-48, 51, 53,
56-51, 64, 68, 73, 75-76, 79,
81, 85, 88-89, 91, 96-98, 106,
110, 113, 115-118, 120,
124-126, 130, 132-134, 137,
150, 141, 160, 165-166, 169,
175, 180, 186-187, 195 (n 19),
199 (n 60), 203 (n 117),
204 (n 122), 205 (n 125),
206 (n 141), 207 (n 142),
209 (n 18), 213 (n 2), 214 (n 11,
12), 215 (n 21, 22), 219 (n 65),
221 (n 86), 233 (n 70),
234 (n 81), 235 (n 85),
239 (n 11)
Europe, 2, 8, 101-102
Everest, Col. F., 6, 180,
240 (n 12)

F

1st Aircraft Assembly Sq., 145
1st Infantry Bn., 153-155
1st Marine Aircraft Wing, 119,
59
1st Marine Bn., 45-46, 229 (n 19)
1st Marine Div., 1, 149
Commander of, 9. See
also Vandegrift.
G-2 Journal of, 216 (n 38)
4th Photo Recon. and Map Gp.,
94-95, 214 (n 12)
5th Air Force, 111-112, 138
5th Bomb. Gp., 25-29, 42, 47, 50,
65, 88, 97, 100, 102, 116, 158,
157-159, 160, 162, 197
(n 26), 202 (n 103), 211 (n 39),
212 (n 46), 215 (n 28),

This Page Declassified IAW EO12958
5th Bomb. Gp. (contd.), 234 (n 72),
235 (n 85), 236 (n 111),
240 (n 12), 241 (n 25)
Eq. Sq., 27
5th Marine Regt., 45, 50
XIV Marine Corps, 149
Commander, 149
42d Bomb. Gp., 172
42d Bomb. Sq., 28, 225 (n 55)
43d Div., 179
44th Fighter Sq., 28-29, 202 (n 103)
46th Station Hospital, 120
424th Bomb. Sq., 169, 180,
234 (n 81)
431st Bomb. Sq., 28
432d Ordnance Co., 23, 225 (n 53)
F4F, 8-9, 12, 33, 44-45, 52, 57-58,
95, 161, 163, 170, 196 (n 53),
199 (n 63), 201 (n 92),
204 (n 120), 216 (n 52). See
also Grumman.
F4U, 182
F-5, 94, 214 (n 16)
F-5A, 95, 159
Fais, 14, 17, 32, 64, 77, 81,
231 (n 41), 233 (n 69)
Fanning Island, 11
Fighter #1, 184
Fighter #2, 152, 161, 164,
215 (n 21)
Fighter Commander, 13th AF, 89, 185
Fiji, 6, 11, 26-27, 43, 45, 56-57,
86, 107-108, 114, 127, 130,
132-133, 139, 142, 200 (n 86),
218 (n 50), 219 (n 65), 235 (n 85)
Fitch, Rear Adm. A. W., 5, 45, 79,
82, 85-86, 88, 90, 113, 165,
232 (n 47)
"Five Islands," 86
Florida Island, 1, 46, 55, 106
205 (n 25)
Force 5455, 87, 211 (n 45)
Eq., 88, 211 (n 45)
Fort Ord, Calif., 5
Foss, Capt. J., 54-55
Fremont, Lt. Col. F. J., 218 (n 53),
234 (n 72)
Fuso, 204 (n 123)

G
G-2, 6, 31-32, 35, 98
G-3, 6, 89
"Gaicos," 138. See also Plaines
des Gaicos.
Gardner, Capt. M., 10, 188
Gavutu, 106
Geiger, Gen. R. S., 96,
209 (n 16), 218 (n 55)
George, Maj. Gen. H. L., 118
Germany, 2, 41
Ghormley, Vice Adm. R. L., 3, 5,
13-14, 32
Gizo Bay, 17, 217 (n 40)
Gizo Island, 20-21, 23
"Goonie," 231 (n 46)
Greene, Maj. E., 180
Ground Control Intercept (GCI)
equipment, 162, 233 (n 56)
Grumman Wildcat, 9, 35, 45-46,
54-55, 57-58, 101, 184,
203 (n 116). See also F4F.
Guadalcanal, Battle for, 1, 150
Guadalcanal-Tulagi area, 149

H
Halavo Beach, 106
Hale, Lt. V. A., 119, 220 (n 85)
Hall, Lt. Col. R. K., 47
Halsey, Vice Adm. W. F., 14-16,
18, 45, 48-49, 62-64, 70, 75,
75-77, 80, 85, 96, 100, 162,
170, 197, 195 (n 1),
232 (n 61), 233 (n 70)
Hamilton Co., 225 (n 59)
Hamilton Field, 5, 111, 117,
119, 138, 172, 219 (n 70),
256-257 (n 96)
Handy, Maj. Gen. T. T., 108
Harmon, Maj. Gen. M. F., 4-6,
8, 10-14, 16-18, 22-23, 25-26,
28, 43-44, 49-50, 56, 53-59,
64, 67-74, 75-78, 80-84, 86,
88-90, 92-94, 101, 107-119,
122-123, 126-127, 129-130, 132,
Harmon, Maj. Gen. E. F., (contd.),
134, 135-144, 148-150, 156, 160,
162, 164-166, 168-169, 172-175,
187, 193 (n 8), 204 (n 118),
208 (n 7), 209 (n 9, 19), 211 (n 45,
49), 214 (n 10), 219 (n 63),
230 (n 29), 237 (n 99), 238 (n 114),
240 (n 15), 241 (n 31)
Hawaii, 9, 26-29, 42-43, 49, 74, 102,
112, 122-123, 134, 138, 146, 150,
162, 168-169, 172-173, 193 (n 10),
232 (n 56), 236 (n 96)
Hawaiian Air Depot, 123, 127, 137-138
Hawaiian Dept., 25, 27-28, 144
Headquarters, AAF, 10, 138, 140-141,
145, 165, 172, 174, 176
Headquarters Flight Section, 225 (n 52)
Headquarters Sq. - 14, 241 (n 25)
Helena, 32, 198 (n 48)
Halseyoppin, 22
Henderson Field, 7-8, 11-13, 18,
22-23, 25-30, 32-33, 35-44, 45, 49,
51, 54-56, 58, 62-64, 67-68, 97,
104, 106, 109-111, 113-114, 179-180,
186-187, 189-190, 197 (n 40),
205 (n 153, 140), 207 (n 141, 142),
215 (n 21), 220 (n 83), 221 (n 89),
233 (n 76)
Hester, Maj. Gen. J. H., 179
Hickam Field, 6, 236 (n 96)
Hill,
No. 27, 151, 155
No. 51, 161, 155
No. 43, 154-155
No. 44, 154-155
No. 50, 155
No. 52, 163
No. 53, 163
No. 56, 163
No. 57, 153
No. 66, 153
Hilai, 57, 203 (n 117), 204 (n 123)
Hoffman, Lt. G. E., 106-107
Hollstein, Lt. Col. C. P., 95
Hornet, 32, 42, 45, 49-49
Howard, Maj. G., 100
Hudson (plane), 71, 78, 170,
210 (n 28)
Hurd, C., 41

Ruttig, Maj. W. D. H.,
216 (n 35)

Imperial Hq., Japan, 63
India, 176
Indispensable Strait, 49
Inter-Island Intelligence Service, 216 (n 37)
Island Air Command, 6

Jacobsen, Lt. G., 46
Jimerson, Col. C. G., 6, 89-90,
211 (n 39), 212 (n 55),
215 (n 25)
Japanese Navy, 104
Johan, Capt. J. E., 59,
205 (n 127), 210 (n 34)
Johnston Island, 11
Joint Board (Army and Navy), 2
Joint Chiefs of Staff, 1, 11,
93, 124, 170, 172, 213 (n 9),
235 (n 85)
Juneau, 203 (n 117)

K
K-4B camera, 93
Kahili Field, 19, 65, 105,
159-160,
166, 180, 182, 231 (n 61),
239 (n 69)
Kapingamarangi Island, 31
Kavieng, 180
Kennedy, 216 (n 39)
Kenney, Gen. G. C., 43-44,
64, 111-112, 114, 129,
170, 172-176, 190
Kont, Lt. R., 56, 214 (n 17)
Kieta, 19, 77, 168
King, Adm., 50-51
Kokumbona, 39, 41, 51-53,
160-161, 165, 166,
230 (n 29)
Eoli Point, 52, 164  
Kolombangara Island, 166  
Knox, Sec., 41  
Kukum, 54  

L  
L-1A, 119  
L-40, 112, 119, 219 (n 65)  
Laffey, 203 (n 117)  
Laknum, 231 (n 41)  
Lembeti, 66  
LB-30, 25, 43  
Lee, Rear Adm. W. A., 60  
Liberator, 182. See also B-24.  
Libra, 203 (n 114)  
Lincoln, Maj. Gen. R. B., 17, 139  
Lucas, Maj. W. Y., 231 (n 45)  
Lunga, 12, 54, 161, 166  
Lunga Plain, 1, 7  
Lunga Point, 21, 33  
Lunga Ridge, 46  
Lunga River, 143  
Lutes, Gen., 117  
Lynch, Lt. J. A., 217 (n 45), 232 (n 63)  

Ma  
MacArthur, Gen. D. C., 1, 43-44, 57, 123, 128, 171  
McCain, Rear Adm. J. S., 3, 5, 7, 77, 93  
McCullagh, 32, 193 (n 49)  
McCormick, Col. H. T., 39  
MacoParland, 199 (n 70)  
McNesse, Lt. H. G., 181  
McNesse, Maj., 44  

M  
Madang, 111  
Magenta Field, 126  
Malaita Island, 47, 104  
Mangum, Lt. Col. R. C., 8, 197 (n 40)  
Mareeba, 200 (n 86)  

Marine, 7-8, 10, 12-13, 17-18, 21, 29-30, 33, 35-39, 40-42, 44-45, 47, 51-52, 54-56, 60-61, 91, 96-97, 104, 112-114, 120-121, 149, 152-153, 163, 181-185, 190-191, 198 (n 53), 201 (n 96), 216 (n 32), 240 (n 20), 241 (n 50, 51)  
Air Commander, Guadalcanal, 209 (n 16)  
Commander, 149  
Hq., 91  
Marine Aircraft Gp. 12, 183  
Commanding Officer, 183  
Marine Aircraft Gp. 23, 8-9, 189, 214 (n 17)  
Marine Aircraft Gp. 25, 109-110, 114  
Marine Arrival, 25, 218 (n 53)  
Marine Air Wing 1 (MAW-1), 113, 215 (n 20), 218 (n 53)  
Marine Utility Sq. 152, 218 (n 53)  
Marine Utility Sq. 253, 218 (n 53)  
Marshall, Gen. G. C., 5, 25, 27, 44, 95, 132, 211 (n 49)  
Marston mat, 54, 164  
Martin Co., 225 (n 59)  
Mason, Rear Adm. C. R., 184  
Matanikau River, 42, 45, 50, 149, 151-152, 164-155  
Matheny, Col. W. A., 240 (n 12)  
Matei, 172  
Maxwell, Col. E., 220 (n 72)  
ME-109, 59  
Mead, 62, 206 (n 133)  
Melbourne, 69  
Meredith, 200 (n 82)  
Merillat, Capt., 205 (n 125)  
Messenger, Lt. H. W., 220 (n 83)  
Metapona River, 55  
Meyer, Lt. J. E., 232 (n 57)  
Midway, 23, 173, 204 (n 122)  
Midway, Battle of, 99  
Military Requirements, Director of, 123  
Milne Bay, 57, 204 (n 121)  
Minneapolis, 223 (n 9)  
Mitchell, Capt. J. W., 46, 163  
Mitsubishi, 55  
Mixer, Lt. C. G., Jr., 220 (n 83)
Mobile Force Central Pacific, 2
Momote Airfield, 197 (n 23)
Monessen, 203 (n 117)
Morton, Lt. J. K., 200 (n 72)
Mott Mute, 143
Mt. Austin, 149, 151-155
Mulsohy, Brig. Gen. F. P., 162, 165, 168-164, 251 (n 41), 233 (n 66), 225 (n 9)
Mulvey, Lt. J. R., 240 (n 17)
Munda, 157-151, 163, 165, 175, 179-180, 182-184, 213 (n 41), 225 (n 161, 158, 231 (n 41), 233 (n 66), 225 (n 9)
"Munda Maulers," 222 (n 51)
Munda Point, 66, 157-158, 163, 165
Munitions Assignment Committee,
93
Nunn, Col. J. C., 96

N
19th Bomb. Gps., 42-45, 49
30th Bomb. Gps., 42-45, 49, 168
93d Sq., 49, 200 (n 86)
98th Bomb. Sq., 28, 159, 231 (n 46)
955th Engineer Topographic Co.,
214 (n 12)
969th Heavy Field Artillery Regt.,
198 (n 56)
Nagoya, 48
Native Scout and Carrier Section,
216 (n 57)
Naval Air Combat Intelligence Center, 66
Naval Intelligence, 91, 96
Naval Operating Force, 124
Naval Transportation Service, 124
Navy, 2-4, 8, 13, 15, 19, 25, 35, 41, 50-51, 66, 82, 91, 95, 95-98, 98, 100, 104, 106-107, 109-114, 126, 145, 150, 162-163, 170-171, 185-186, 190, 204 (n 123), 215 (n 21), 218 (n 85), 225 (n 85), 240 (n 20), 241 (n 30, 51)
Madi, 22, 235 (n 85)
Nelson, Lt. L. W., 220 (n 85)
New Caledonia, 1-6, 5-6, 17, 22, 45, 50, 56-57, 69, 86, 97, 107-109, 112, 115, 116, 126-127, 132-134, 137-139, 142, 144, 146-147, 200 (n 85, 86), 204 (n 118), 211 (n 45), 215 (n 50), 219 (n 63), 221 (n 86), 229 (n 16), 235 (n 85)
New Georgia, 17, 19-21, 59, 66, 104, 157-158, 182, 203 (n 116), 217 (n 39), 233 (n 69)
New Guinea, 51, 111
New Hebrides, 1, 169
New Orleans, 223 (n 9)
New York, 41
New Zealand, 3, 16-17, 25, 107-109, 115-118, 126, 158, 185-186, 210 (n 25), 218 (n 50), 219 (n 63)
New Zealand Air Force (RNZAF),
225 (n 52), 226 (n 65)
Nimitz, Adm., 3-4, 168-170, 197 (n 31, 36)
Norden, 35
Norfolk, 118
North American Co., 225 (n 59)
Northampton, 225 (n 9)
Noumea, 4-5, 16, 32, 56, 91-92, 94, 96-97, 119, 122, 124-126, 130, 153, 156-157, 172, 196 (n 2)
Nusave, 182

O
124th Japanese Infantry Regt.,
229 (n 14)
132d Infantry, 151-152, 156, 178
147th Infantry Regt., 156
151st Infantry Regt., 156, 178
154th Regimental Combat Team
(Infantry), 35, 40, 47, 49, 149, 218 (n 37)
182d Infantry Regt., 149, 229 (n 19)
1034th Signal Co., 133
1353d Ordnance Supply and Maintenance Co., 133
1932d Quartermaster Truck Co.,
133
Oahu, 25, 168-169, 239 (n 11)
Oka, Col., 229 (n 14)
"OKA" unit, 151, 156, 229 (n 14)
Operations Div., (OPD), 89, 127-130, 155, 170, 172
OPNAV, 197 (n 51)
Ostram, Gen., 143, 227 (n 78)
Owens, Capt. F., 96

F
P-38, 10, 45-44, 56-58, 65-56, 82, 92, 94-95, 105, 125, 163-164,
166, 174, 175, 180-182,
204 (n 89), 204 (n 118), 180 (n 121),
214 (n 15), 233 (n 65), 240 (n 16, 17)
P-39, 8, 10, 35, 37, 39, 44-47, 49,
51-53, 55-56, 58, 62-63, 66,
149-150, 152-153, 155, 158, 161,
164, 166, 173, 184, 191, 196 (n 26),
198 (n 63), 199 (n 68), 201 (n 91,
96), 206 (n 114, 116), 204 (n 120),
205 (n 133), 233 (n 65)
P-39D-1, 194 (n 12)
P-40, 58, 66, 164, 166, 178, 180-181,
184-185, 233 (n 65), 240 (n 16)
P-40F, 140
P-47, 10
P-70, 162, 232 (n 56)
P-400, 8-10, 12, 35-37, 39-41,
44-45, 47, 51-52, 57, 125, 191,
194 (n 18), 196 (n 26), 188 (n 53),
201 (n 89, 91), 204 (n 120),
233 (n 65)
Packer Co., 225 (n 69)
Palau, 19
Paliku Island, 126
Palmer, Capt. S. A., 106-107,
217 (n 45)
Palmyra Island, 11, 28
Papua, 146
Patch, Gen. A. M., 149, 161, 166,
162, 229 (n 4)
Patterson Field, 123
PB4Y, 180-181
PBY, 22, 47, 66, 71, 73-75, 81-82,
101, 103, 105-106, 109, 114, 165,
210 (n 30)
PBY-5A, 105-106
Pearl Harbor, 42, 92
Pensacola, 228 (n 9)

Peterson Field, 213 (n 10)
Petty, Capt. C. E., 114,
219 (n 66)
"Pistol Pete," 34-36, 38, 63,
198 (n 55)
Plaines des Gaies, 3, 6, 112,
138, 205 (n 125)
Poha River, 151, 155
Pt. Cruz, 50, 52, 149
Porsis, Lt., 225 (n 53)
Port Moresby, 45, 160, 170,
204 (n 121), 232 (n 47)
Pratt, Capt. G. D., 232 (n 57)
Pratt and Whitney Co., 225 (n 59)
Presidential Citation, 169
President Polk, 169
President Tyler, 27, 169,
136 (n 10), 197 (n 31)
Pressey, Col. H. W., 155
Puller, Lt. Col. E. B., 46-47
Purnell, Lt., 45
"Puha-Maru," 230 (n 27)

Q
Quackenbush, Condr., R. F., Jr.,
95, 213 (n 1)

R
R4D-1, 218 (n 53)
R-1820-65 engine, 136-139
R-1820-97 engine, 138
Rabaul, 17, 19-20, 50, 42, 44, 52,
61, 77, 82, 95, 160, 165-186,
180, 182, 190, 214 (n 10)
Rabaul Wharfs, 231 (n 41)
Rasmussen, Maj. P. O., 22
Reketa, 157, 231 (n 41)
Reketa Bay, 17, 25, 217 (n 40)
Remora Island, 20, 196 (n 10)
Rennell Island, 32, 198 (n 48)
Replacement Training Units, 176
Ridings, Lt. Col. E. E., 35,
136 (n 24)
Rist, Lt. R. E., 161
Rolls-Royce Packard Co., 140
Roosevelt, Pres. F. D., 143, 147
Row, Lt. R., 181
Royal Air Force (RAF), 102
Rufe (plane), 59
Russell Islands, 62, 158, 179, 184

S

2d Aircraft Assembly Sq., 145-146
2d Infantry Bn., 164-165, 178
2d Infantry Div. (Jap), 39
II Island Command, 6, 87
2d Marine Aircraft Wing, 152, 153-154, 215 (n 20), 241 (n 25)
2d Marine Bn., 45
2d Marine Div., 151-152
2d Marine Regt., 149
6th Air Service Sp., 127, 130, 132-133, 139, 224 (n 37)
Bz Sq., 153
6th Marine Regt., 150, 156
6th Night-Fighter Sp., 162
6th Seabee Bn., 7, 34-35
6th Troop Carrier Sq., 111
7th Air Force, 27-28, 50, 169
A-2 Section, 215 (n 27)
7th Marine Regt., 46
17th Army, 50
17th Photo Recon. Sq., 94-95
213 (n 10, 12), 241 (n 25)
65th Engineers, 154-155
67th Bomb. Sq., 202 (n 107)
67th Fighter Sp., 1, 3-9, 11-12, 36-40, 51, 64-65, 60, 62-65, 96, 128, 131, 176, 191,
203 (n 90, 96), 202 (n 103), 229 (n 16), 241 (n 25)
68th Fighter Sp., 106, 152,
202 (n 103), 217 (n 45),
232 (n 53), 241 (n 25)
69th Bomb. Sq., 1, 25, 57-59, 172, 175-176, 202 (n 103), 204 (n 122), 233 (n 66),
237 (n 107), 241 (n 25)
70th Bomb. Sq., 25, 57-59, 62, 172, 202 (n 103), 206 (n 141)
70th Fighter Sp., 152, 202 (n 103),
241 (n 25)
71st Service Sp., 133
72d Bomb. Sq., 25, 29, 35,
196 (n 24), 202 (n 103),
238 (n 11)

75th Sq., 172, 237 (n 98)
655th Ordnance Co., 133
Sacramento Air Depot, 127,
237 (n 96)
Sally (plane), 203 (n 114)
Salt Lake City, 198 (n 48)
Sanon, 158
San Cristobal Island, 56, 207
(n 141), 217 (n 43)
Sandfly Bay, 207 (n 144)
Sandfly Island, 215 (n 39)
San Francisco, 122-123, 129-130,
143, 146, 172, 213 (n 10)
San Juan Hill, 214 (n 11)
Santa Cruz Islands, 21-22, 48
Santa Cruz Is., Battle of, 48
Santa Isabel Island, 17, 19, 23,
37, 52, 104, 217 (n 40),
240 (n 14)
Saunders, Col. L. G., 3, 7, 18-19,
23, 29-30, 35, 65-66, 69,
71-75, 79, 92, 95, 98, 168,
189, 195 (n 5), 199 (n 56, 60),
206 (n 4), 209 (n 14), 240 (n 12)
Savage, Lt. (J. g.), S., 96
Saville, Gen., 165
Savo Island, 57-59, 61, 178
Savo Sound, 55
SBD, 8, 37, 39, 44, 46, 52, 56-58,
61, 96, 150, 152-153, 157, 161,
164, 190-191, 199 (n 68),
204 (n 20), 209 (n 16), 210 (n 25)
Scott, Adm. N., 32, 198 (n 49)
SCR-241, 141
SCR-527, 232 (n 56)
SCR-576, 140-141
SCR-586, 162
Seabees, 36, 145
Sealark Channel, 106
Segl. 217 (n 59)
Second Channel, 7, 9, 124-125
Services of Supply, USAFSPA, 84,
90, 122, 134
Commanding General, 143
Service Sq., 14, 241 (n 25)
Sesso, Lt. R., 47-49, 210 (n 34)
Sewart, Maj. A. J., Jr., 65
Sherman, Col. L. G., 8, 91-92
Shortland Harbor, 238 (n 107)
Shortland Island, 17, 19-20, 25,
29-31, 54, 74, 106, 180,
231 (n 41), 239 (n 9)
Simpler, Lt. Comdr. L. C., 138, 242 (n 36)
"Skipper," 22, 159
"Sleepless Lagoon," 190
"Slot," 19-20, 22, 30-35, 41, 51, 54, 66, 130, 131, 190
Smith, Maj. J. J., 8
Smith, Maj. S. W., 98-99, 213 (n 1), 215 (n 23)
Society Islands, 145
Somers' Lieutenants, Gen., 125
SOPAC Combat Air Transport Command (SOPAC), 115-116, 117, 120
SOS, 222 (n 2)
South Dakota, 42, 53, 56, 61
South Pacific Photo Interpretation Unit (SPPU), 91, 99-99, 215 (n 21, 23)
Spry, pilot, 115
Stefanowicz, Maj. L. L., 58
Stratemeyer, Gen., 128, 146, 208 (n 4), 213 (n 70)
Strother, Lt. Col. D. C., 6, 89
Suva, 5

13th Air Force, 5, 85-91, 98, 154, 185, 211 (n 45), 214 (n 11), 216 (n 55), 241 (n 23)
A-2 Section, 215 (n 23)
Air Surgeon, 167, 218 (n 55)
Chief of Staff, 90
HQ. & Hq. Sq., 86, 212 (n 51)
XIII Air Force Service Command, 154
XIII Bomber Command, 86, 88
XIII Fighter Command, 86, 88
HQ. & Hq. Sq., 212 (n 51)
13th Troop Carrier Sq., 111-114, 121, 202 (n 103), 221 (n 89)
23d Bomb. Sq., 26-27, 29, 202 (n 103)
25th Div., 150-152, 154-156, 229 (n 19), 239 (n 1)
26th Bomb. Sq., 28, 160
27th Infantry Div., 165
29th Air Service Gp., 127, 130, 132-133, 139
29th Infantry Regt., 46
30th Div., 51
31st Bomb. Sq., 27, 29, 197 (n 29), 202 (n 103)
333 Troop Carrier Sq., 111-112, 114
35th Infantry, 152, 154-155
36th Bomb. Gp., 172
38th Div., 65
38th Service Sq., 133
228th Infantry Regt., 202 (n 103)
250th Infantry Regt., 51
307th Bomb. Gp., 168-169, 239 (n 11), 241 (n 25)
HQ., 169
HQ. Sq., 234 (n 61)
321st Sq., 45, 49
336th Fighter Sq., 241 (n 26)
339th Fighter Sq., 65, 152, 163, 174, 182, 201 (n 90), 202 (n 103), 204 (n 118)
347th Fighter Gp. Detachment, 90 (n 96)
Tanambogo, 106
Tassaferonga, 60, 62, 150, 153,
158
TBA, 90
TBD, 190
TFE, 44, 52, 56-59, 61, 95, 150,
157, 184, 199 (n 68), 204 (n 120)
Tenamba River, 173
Tetipari Island, 217 (n 43)
Tevelco, 145
Thom, Lt. C., 96, 215 (n 28)
Times, New York, 41
Tinsley, Lt. Col. W. F., 186,
241 (n 29, 30)
Tokyo, 41, 231 (n 46)
"Tokyo Express," 39-32, 34, 37, 41,
46, 50-52, 150-151, 161, 178
Tontouta Air Base, 55-57, 109, 114,
120, 125, 129, 135, 175,
223 (n 27)
 Tonga, 38
Tongareva, 118, 145
Tongatapu, 11, 25, 86, 118, 142,
235 (n 66)
Tonolei, 12, 14, 19, 53, 77, 158,
209 (n 15)
Tonolei Harbor, 23
Townsville, 129
Tresager, Lt. G., 161
Transportation Corps, 124
Truk, 17, 23, 47, 61
Tulagi, 1, 7, 29, 51, 105, 105
Tulagi Harbor, 106
Tutuila Islands, 138
Twining, Brig. Gen. N. F., 6,
83-84, 86, 88-90, 95, 140-141,
217 (n 44)
"Typhoon McCom," 205 (n 127),
231 (n 46)

U
United States Army Forces in
South Pacific Area (USAFISPA),
4-6, 14-15, 17, 28, 84, 89,
91-92, 95, 96, 122, 195 (n 2),
211 (n 29), 213 (n 1), 220 (n 72)
Assistant Air Surgeon, 218 (n 53)
Commanding General, 63
"USO crew," 205 (n 127)
Utah, 23

V
V-1650 engine, 140
V-1710-65 engine, 138
V-1710-65 engine, 136
Vandegrift, Gen., 9-10, 57, 61,
105, 121, 149, 221 (n 89)
Vaudry, Capt. J., 119, 220 (n 83)
VCS Rom. 3 (Sq.), 241 (n 25)
Vella, Intellia, 59, 66, 74,
213 (n 39)
Verahui, 156, 178
VF-72, 241 (n 25)
Vila Plantation, 166, 182
Visale, 155
VMB-225 (Marine Sq.), 7
VMEB-232 (Marine Sq.), 6, 197
(n 40)
VMSB-234, 241 (n 25)
VP-13, 106
VS-4D-14, 241 (n 25)
VTB-11, 12, 16, 241 (n 25)
Vunakanae, 231 (n 41)

W
Walker, Lt. J. V., 110
War Dept., 4, 25-28, 50, 87-89,
170
"Washington Machine Charlie," 159,
162, 165, 188
Washington, 42, 55, 56, 61,
205 (n 123)
Washington, D. C., 1, 4, 16, 80,
85, 92, 109, 117, 126, 131,
146, 169, 218 (n 56)
Western Defense Command, 172
West Point, 209 (n 14)
Whitaker, Col. N., 33, 196 (n 24)
Whitten, Col. L. B., 128
Willis, Lt., 207 (n 144)
Wolfert, L., 199 (n 56)
Woods, Brig. Gen. L. B., 240 (n 22)
Wright, Rear Adm. C. H., 150
Wylie, Gen., 124

Z

Zeilin, 54
Zeke, 59
Zero, 3, 31, 39-40, 45-46, 49, 51,
54-55, 60, 62, 65-66, 68-69, 161,
178, 181-182, 184, 203 (n 109, 116),
210 (n 34)
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